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For The Year 1926.

EXTRACTS RELATING TO SIND.

EXCAVATIONS IN SIND.

In India proper antiquarian interest during the last three or four years was focussed primarily on the excavations conducted by Sir John Marshall and his assistants in the Indus country. These explorations have brought to light the extensive remains of a very early civilisation, far more remote in date than any dateable antiquities which had hitherto been unearthed in Indian soil. It is not too much to say that these startling discoveries have entirely changed the aspect of Indian archaeology. It will be remembered that Indian history, as far as it can be said to be chronologically fixed, begins only from the campaign of Alexander the Great in the Punjab and from the rise of the Maurya dynasty in Magadha. The earliest dateable epigraphs (2) Indian aerchaeology can boast of the famous edicts of Asoka belong to the middle of the 3rd century B.C., a time which in the eyes of an Egyptologist or Assyriologist must be qualified as frankly modern. The remains, however, now unearthed in the Indus country are believed to carry us back to 3000 B.C.

We may perhaps be excused for recalling the circumstances which have led to the remarkable discovery of this unknown phase of Indian culture. It was Sir Alexander Cunningham (3) that great pioneer of Indian archaelogy, who first drew attention to an ancient site near Harappa, a small village situated on the railway line halfway between Lahore and Multan. This site—"the most extensive of all the old sites along the banks of the Ravi"—he described as a "continuous line of mounds about 3500 feet in length sometimes rising to 60 feet in height and covering an area of nearly 2½ miles in circuit which must mark the place of a ruined city." It was not however on account of its extent that the site of Harappa drew the attention of archaeologists, but because it was the find-place of engraved seals of a very peculiar type unlike anything of the kind found in India.

Three specimens of these Harappa seals which are now preserved in the British Museum were described by the late Dr. J. F. Fleet (4) the well-known authority on Indian epigraphy. Two of them show the effigy of a one-horned bull, very different from the familiar humped bull of India. The elongated body rests on short legs; the muscles round the neck are strongly marked. Moreover the seals are engraved with an inscription in characters absolutely different from the earliest known scripts of India. The third seal in the British Museum bears only an inscription in similar characters. Dr. Fleet did not attempt to decipher the mysterious epigraphs. He published them "in the hope that recent discoveries in various directions might give a clue to the true nature of the characters and the meaning of them."

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*1. Arch. Survey of India, Annual Report, 1923-24, pp. 47-54, places XVII.—XXI.

2. A fragmentary Aramaic inscription found by Marshall on the site of Taxilla in the Panjab was ascribed by Cowley to the middle of the 4th century B.C. Cf. J.R.A.S. for 1915, pp. 342-47.

3. Arch. Survey Report, Vol. V (1875), pp. 105-8, plates XXXIII, Fig. 1. the Ravi is the ancient Iravati.

4. J. R. A. S. for 1912.

پاران ايم ايڇ پنهور انسٽيٽيوٽ آف سنڌ اسٽڊيز، ڄامشورو.
Digitized by M. H. Panhwar Institute of Sindh Studies, Jamshoro.

During the cold season of 1920-21 some trial excavations were carried out at Harappa by Rai Babadur D. R. Sahni which resulted in the recovery of more seals of the type referred to above. Unfortunately the site of Harappa has suffered irreparable damage at the hands of railway contractors at the time that the railway from Lahore to Multan was under construction.

It was in the year 1922 that Mr. R. D. Banerji undertook the exploration of a Buddhist stupa at a locality known as Mohenjo-daro, in the Larkana district of Sind. Here too at a distance of some 400 miles from Harappa, there is vast expanse of artificial mounds, evidently marking the site of a once flourishing city situated along a new dry bed of the river Indus, from the highest of these mounds which once must have formed an island in the river there rose the Buddhist stupa, surrounded by subsidiary buildings apparently belonging to the second century A.D. On further exploration this mound proved to be raised on mudh earlier remains—brick buildings which at other parts of the site appeared close to the surface. Among these a great variety of antiquities were found: pottery both painted and plain; terra-cottas; toys; bangles of blue glass, paste and shell, new types of coins or tokens; knives and cores of chert; dice and chessmen; a remarkable series of stone rings; and most important of all, a number of engraved and inscribed seals similar in type to those found at Harappa (plates IVb and V).

"Of all those antiquities" Sir John Marshall wrote (1) "the most valuable are the stone seals, not only because they are inscribed, with legends of an unknown pictographic script, but because the figures engraved on them, and the style of the engraving, are different from anything of the kind hitherto met with in Indian art. Some of them are of steatite, others of ivory, and others of stone and paste. In shape most are square, and provided at the back with a boss pierced with a small hole for suspension. The animals engraved on them are in some instances bulls; in others, unicorns; but it is to be observed that neither the Indian bumped bull nor the water-buffalo occur among them."

In the year 1924-25, preliminary excavations were made at Mohenjo-daro by Mr. K. N. Dikshit. In the summer of 1925 Mr. H. Hargreaves was deputed to Baluchistan in order to explore certain mounds at a locality called Nal in the Jhalawan district. The result of this expedition was the discovery of a number of burials of the Chalcolithic Age and of a fine series of painted pottery, and of implements of copper and stone.

Thanks to the sympathetic interest of the Government of India and the generous support of the Legislative Assembly, Sir John Marshall was enabled to undertake explorations on a much vaster scale at Mohenjo-daro in the cold season of 1925-26. From the preliminary account of these excavations (2) we may quote a few particulars.

The site of Mohenjo-daro represents an extensive city the central part of which, covering an area of about a square mile, takes the form of rolling mounds of brick debris some 30 feet in height dominated by a higher mound at its north-western corner. This mound which was capped by the Buddhist stupa referred to above appears to conceal the remains of the principal temple of the ancient city.

1. The Illustrated London News, Sept. 20, 1924, p. 528.
2. The Illustrated London News, February 27, pp. 345ff., and March 6, 1926, pp. 398ff. and The Times, February 26 1926, pp. 15f and 18.

The great majority of the buildings appear to be "ordinary dwelling-houses or shops, which for the most part are divided into good-sized rooms, furnished with their own wells and bathrooms, floored over with brick, and provided with covered drains connected with larger drains in the side streets. The existence of these roomy and well built houses, and the relatively high degree of luxury denoted by their elaborate systems of drainage, as well as by the character of many of the smaller antiquities found within, seem to betoken a social condition of the people much in advance of what was then prevailing in Mesopotamia or Egypt" (Plates I and II).

We are greatly indebted to Sir John Marshall for his courtesy in allowing us to reproduce here a number of excellent photographs relating to his explorations at Mohenjo-daro. One of the most striking finds made is "that two statues of bearded men, one carved out of alabaster, the other of limestone, finished with a veneer of fine white paste, its eyes inlaid with shell, and the patterning of its robe picked out in red ochre." (Plate IIIb).

Our plate IIIc will give an idea of the great excellence and variety of the pottery which has come to light in the course of these excavations.

Buried beneath the floors of the houses were found a number of copper vessels and utensils, one of the larger vessels containing a valuable collection of jewellery. This collection comprises "gold and silver bangles, ear-ornaments, gold netting needles, charms, and two particularly handsome necklaces or girdles (kanchi) made of tubular beads of carnelian with terminals and smaller beads of copper gilt." (Plate IVa).

"What is particularly striking" Sir John Marshall writes "and not a little anomalous about these finds is the great disparity in the quality of their technique... Rough flakes of chert for example, which served as knives and scrapers have been found in hundreds all over the site, and these utensils are as crude as such objects could well-nigh be. But mingled with them and contrasting strongly with their primitive appearance, are finely made objects of gold and blue faience and exquisitely engraved seals, such as could only have been turned out by people possessed of marked artistic ability as well as great technical skill; while the construction of the buildings themselves is far superior to anything of the kind in later India. Iron, of course, was unknown in this early age, but gold, silver, copper and lead were all being worked, and the discovery of some specimens of cinnabar suggests that the indo-Sumerians knew how to extract mercury from this mineral.

In the course of Sir John Marshall's excavations specimens of the mysterious "Harappa Seals" were found in considerable numbers. One bears the effigy of a Brahmani bull "which in the stylish treatment of the dewlap, the modelling of the muscles; and the slenderness of the hoofs, recalls the best glyptic efforts of Mycenaen Greece." Another specimen shows a stylicized asvattha tree (Ficus Religiosa) with twin heads of some horned animal springing from its trunk. Others again are inscribed with pictographic characters alone. (Plate IVb and V).

The pictographic script employed in these documents still baffles decipherment. The claim made by Mr. L. A. Waddell in some recent publications (1) of having solved

1. L. A. Waddell, The Indo Sumerian Seals deciphered. Discovering Sumerians of Indus Valley as Phoenicians, Barats, Goths, and famous Vedic Aryans 3100-2300 B.C. London 1925 (Cf. J. R. A. S. for 1925 pp. 797 ff.) The same author contributed a paper under the title Dynasty of Haryashawa of the Sumerian Uruash (Ur-nina) as Imperial Kings of Kish, Erek and Lagash in Mesopotamia about 3100-2900 B.C. to the Asiatic Review of October, 1926.

the enigma has found no acceptance among competent scholars. We may refer the reader to the extracts from reviews quoted in our "Bibliography." There is however no reason to despair. Human ingenuity has succeeded in finding the key to other "unknown" scripts, such as the hieroglyphs and the cuneiform.

What name are we to apply to the ancient civilisation which the sandy plains of the Indus have revealed? It has become the fashion now to call it "Indo-Sumerian." The application, it is true has some justification in a find made in 1923 in the course of the excavations of the Oxford and Field Museum Expedition at Kish in Mesopotamia. It consists of a steatite stamp-seal which was found in the foundations of a chamber at a depth of nearly 2 metres below the surface of the ground on the north east side of the ziggurut, or temple tower, of the war-god Ilbaba (the mound locally known as Tell Ahaimir). This seal which shows the figure of a long horned bull, and is said to be of early Sumerian date, is clearly the same type as the seals found at Harappa and Mohenjo-daro (2).

On the other hand, it should be remembered that after the first discoveries in Sind had become known, Professor A. W. Sayce the distinguished Assyriologist, expressed himself in the following terms (3). "The inscribed "seals" or plaques found at Harappa and Mohenjo-daro are practically identical with the Proto-Elamite 'tablettes de comptabilite' discovered by De Morgan at Susa. The form and size of the plaques are the same, the 'unicorns' are the same, and the pictographs and numerals are also the same. The identity is such that the 'seals' and tablets might have come from the same hand."

What more precise date regarding the unknown culture of the Indus country further explorations may bring, no one can tell. This much is certain that the excavations of Sir John Marshall have proved the existence of very early relations, say of about 3,000 B.C. between India and Mesopotamia. The probability of such relations had, indeed, been surmised long ago by students of comparative religion and mythology. We need only quote the myth of the Deluge. But Harappa and Mohenjo-daro have yielded the first tangible proofs of a cultural contact between those two great civilizations of Antiquity.

We are authorised by Sir John Marshall to announce his intention of bringing out a three-volume monograph which will include a full account of all excavations carried out at Mohenjo-daro since 1922-23, and which will be profusely illustrated with photographs, plans of buildings, and drawings of minor objects of outstanding interest. Such a publication, it is hardly necessary to add, will be heartily welcomed; for it has been rightly said that no such epoch-making discoveries have ever fallen to the lot of an archaeologist in India. "At a single bound," Sir John Marshall wrote, "they have taken back our knowledge of Indian Civilization some 3,000 years and have established the fact that in the 3rd millenium before Christ and even before that the peoples of the Punjab and Sind were living in well-built cities and were in possession of a relatively mature culture with a high standard of art and craftsmanship and a developed system of pictographic writing."

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2. It was published by Mr. Ernest Mackay in J.R.A.S. for 1925, pp. 697ff. plate X.

3. The Illustrated London News, September 27, 1924, p. 566. Another competent scholar, Prof. Dr. Fr. W. Freiherr von Bissing has arrived at the same conclusion. See his paper; Ein vor etwa 15 Jahren erworbenes ("Haappa Siegel", Archiv für Orient forschung, Vol. IV January-Febtuary 1927) pp. 21f.

1927.

THE PRE-HISTORIC CIVILIZATION OF THE INDUS. (Extract from a paper by Sir John Marshall, Kt., C.I.E., M.A., Litt., D., F.S.A., Director General of Archaeology in India). Published in extenso and with numerous illustrations in the Illustrated London News, January 7 and 14, 1928.

The remains now laid bare at Mohenjo-daro, cover an area of more than 13 acres and belong to the three latest cities on the site. The best built structures are those of the third city; the poorest of the first. All, however, are built of well burnt brick usually laid in mud, but occasionally in gypsum mortar, with foundations and infillings of sun-dried brick. Of the various groups of buildings that have been exposed the most striking are focussed round about a lofty eminence near the north-west corner of the city, which in after times was crowned with a Buddhist stupa. Beneath this stupa there are reasons for believing that the chief temple of the city is located, and it is probable that the structures grouped around it are all of a religious or quasi-religious character. Outstanding among them is an imposing edifice containing a large bath or tank. (For a view of the "tank" building see Annual Bibliography for the year 1926, plate II). 39 feet in length by 23 feet in breadth, and sunk 8 feet below the floor level. On its four sides is a boldly fenestrated corridor, with a platform in front and halls or small chambers behind. The outer wall, which is more than 6 feet in thickness with a pronounced batter on the outside was pierced by two large entrances on the south and smaller ones on the east and north. Of the chambers ranged along the east side of the building the middle one is occupied by a large well from which the bath could be fed. At either end of the bath is a descending flight of steps with a shallow landing at their foot. Like the bath room floors of the private houses the floor is laid in finely jointed brick-on-edge and remarkable care and ingenuity has been excersied in the construction of the surrounding walls. These walls which are nearly ten feet in thickness are made up of three sections; the inner and outer of burnt brick the infilling between them of sundried brick; but in order to render them completely watertight the brick work has been laid in gypsum mortar and the back of the inner wall coated with an inch thick layer of bitumen. Bitumen was also used for bedding the wooden planks with which steps were lined.

Apart from the above, the remains brought to light at Mohenjo-daro are for the most part private dwelling houses or shops (plate I) which tend to confirm more and more our earlier impression that the amenities of life enjoyed by the average citizen at Mohenjo-daro were far in advance of anything to be found at that time in Babylonia or on the banks of the Nile.

Owing to its close connection with the Sumerian civilisation of Mesopotamia the prehistoric civilisation revealed at Mohenjo-daro and Harappa has hitherto been designated by the name 'Indo-Sumerian.' With the progress of exploration, however, it has become evident that the connection with Mesopotamia was due, not to actual identity of culture, but to intimate commercial or other intercourse between the two countries. For this reason the term "Indo-Sumerian" has now been discarded and "Indus" adopted in its place.

The date of the buildings described is determined within tolerably narrow limits by the discovery of at Susa and several sites in Mesopotamia of typical Indian seals

inscribed with Indian pictographic legends, in positions which leave no doubt that they belonged to the period before Sargon I—that is before about 2700 B.C. On another seal of the same pattern recently unearthed at Ur, the legend is in cunieform characters of about 2700 B. C. It may be inforred, therefore, that this class of Indian seal is to be assigned to the first half of the third millenium B.C. or earlier and in as much as seals of this class are associated with the three uppermost cities Mohenjo-daro, we may confidently fix the date of these cities between 3500 and 2500 B.C.

Taking everything into consideration, a period of six centuries may reasonably be allowed for the rise and fall of the three cities, and we shall probably not be far wrong, if we previously assign the first city to about 2700 B.C., the second city to about 3000 B.C., and the third city to about 3300 B.C.

Besides bread and milk, the food of the Indus people, appears to have included beef, mutton and pork; the flesh of tortoises, turtles and gharial; fresh fish from the Indus and dried fish imported from the sea coast. Evidence of these various articles of diet is furnished by bones—sometimes in a half burnt condition—found among the houses.

Among the domesticated animals were:—the humped Indian long-horned bull (bos Indicus) of which to judge by the frequency of the remains, large herds must have been maintained, the buffalo (bos babalus), a short-horned bull, the sheep, pig (sus cristatus); dog, horse and elephant. No trace has been found of either the camel or the cat. The horse in the Indus Valley was the small equus caballus, near akin to the Indian country bred. Of dogs, there are two very distinct breeds; one the canis familiaris, closely related to the common pariah, and the other remarkably like our present day mastiff.

The remains of wild animals are few, but among those frequently depicted on the seal-stones are the tiger, rhinoceros, and elephant, the presence of which may be taken as an indication that the climate was damper, and the vegatation more dense than at present. The lion, which prefers arid and sparsely covered country, does not occur.

Numerous spindel whorls in the debris of the houses attest the practice of spinning and weaving, and scraps of a fine woven cotton material have also been found. The Babylonian and Greek names of cotton (Sindhu and Sindon respectively) have always pointed to the Indus Valley as the home of cotton growing.

Male attire among the upper classes consisted of two garments; a skirt or kilt fastened round the waist, like the primitive Sumerian skirt, and a plain or patterned shawl which was drawn over the left and under the right shoulder, so as to leave the right arm free. Men wore short beards and whiskers, with the upper lip sometimes shaven, as in Sumer, sometimes not. Their hair was taken back from the forehead and coiled in a knot at the back of the head with a fillet to support it. The one and only head of a female statue that we possess shows the hair falling loose behind but whether this was the prevailing fashion or not is questionable. Among the lower classes, men apparently went naked, and women with a narrow loin cloth only, though there is one statuette of a dancing girl without even this garment (plate IId). Ornaments, however, were freely worn by all classes alike; necklaces and

finger-rings by both men and women; ear-rings, bangles, girdles, and anklets by the latter only.

The ornaments of the rich were of silver and gold or copper plated with gold, of blue faience, ivory, carnelian, jadiete, and multi-colour stones of various kinds. For the poor, they were mainly of shell or terra-cotta. Many examples of both kinds have been recovered. Especially striking are the girdles of carnelian and gilded copper, and some of the small objects, e.g., earrings and "netting" needles of pure gold, the surface of which is polished to a degree that would do credit to a present day jeweller.

Besides gold and silver, the Indus people were familiar with copper, tin and lead. Copper they used freely for weapons, implements and domestic utensils; daggers, knives, hatches, sickles, celts, and chisels, vessels, figurines and personal ornaments, amulets, wire, etc. Most of these objects were wrought by hammering, but examples of cast copper are not unknown. The number of bronze objects is comparatively small, doubtless owing to the difficulty and cost of procuring tin. The paucity of weapons at both Harappa and Mohenjo-daro is surprising, the only ones yet found being a few mace-heads, axes, daggers, arrow-heads, and possibly spear-heads. It looks as if these cities were but little acquainted with warfare. While copper was used, and used freely, for all sorts of utensils, knives made from flakes of chert were also common and show, like the stone maces and celts, that the influence of the neolithic age had not entirely passed away.

Common domestic vessels were of earthenware. Their great variety of shapes, each evolved for some particular purpose—evidence a long period of antecedent development, though it is curious how few of the vases are provided with handles. Most of the pottery is plain undecorated red ware, but painted ware is by no means uncommon (see An. Bibl. for 1926, plate IIIc.). As a rule the designs are painted, in black on a darkish red slip and consist of geometric and foliate devices with occasional figures of animals.

The seals (ibidem, plates IV and V) of which nearly a thousand have been recovered, were worn by a cord round the neck or wrist, and were used probably for sealing parcels, merchandise, etc., just as they were used in historical times in India. It is not improbable also that they may have served as amulets, and that the animals engraved on them may have had some religious significance.

The art of the Indus is distinct from that of any neighbouring country, notwithstanding the elements in common between them. The best of the figures on the engraved seals—notably the humped Indian bulls and short-horn cattle—are distinguished by a breadth of treatment and feeling for line and form unequalled in the contemporary glyptic art of Elam or Mesopotamia or Egypt. The modelling, too, in faience of miniature rams, monkeys, dogs and squirrels is of a very high order—far in advance of what we should expect in the 4th and 3rd milleniums B.C.

That there were some features in common between the religious cults of the Indus and Mesopotamian peoples may be inferred from several figures closely resembling the Babylonian Enkidu (fig. 4) which are engraved on seals and copper pieces. The numerous terra-cotta figurines, moreover, which portray a nude female (fig. 2) crowned with elaborate head-dress and bedecked with ornaments, can hardly fail to be identified with the figures of the mother goddess familiar in Mesopotamia and countries further to the west,

That totems played an importart part in the religion of the 'Indus' people seems evident from the statues and other representations of a strange composite animal, partly ram, partly bull and partly elephant (fig. 3) as well as from a multitude of other animals—real or fabulous—engraved on the seals, among which attention may be drawn especially to a pair of ass-headed creatures singularly like those depicted on a well-known Mycenaean gem from Vaphio in Greece.

There are other elements which are characteristically and exclusively Indian. Thus, one of the sealings depicts a figure seated cross-legged with snake-hooded Nagas worshipping on either side, just as they were portrayed worshipping the Buddha in sculptures three thousand years later. Then there are certain curious rings and phallus-like objects—the latter somewhat resembling in form the so-called chess-men pillars of Assam, the religious character of which can hardly be doubted, though their symbolic meaning, has not yet been established. A great variety of both classes of objects has been found at Harappa and Mohenjo-daro. The majority are of stone; but some of the smaller ones are of terra-cotta ; others of bone or shell or faience. Some of the rings are no more than an inch in diameter; others again are so large that two men can scarcely lift them (plat Ia). A group of these stone rings of different sizes are found in a single room of a building at Mohenjo-daro, and another similar group was found at Harappa.

Whatever the extent of the Indus civilisation within India itself, there is no question that it formed part and parcel of the wide flung chalcolithic culture of Asia and Europe, which extended from the Adriatic to Japan but was focussed primarily in the great river valleys of the south of the Nile, the Euphrates, the Tigris, the Karun, the Helmund, and the Indus. This is an important point to have established; for it means that India came within the same circle of culture as the rest of Asia; that she passed step by step through the same phases of development as her neighbours on the West; and that, so far as the latter phases are concerned; she passed through them at approximately the same time, though whether at an earlier epoch she took the lead of her neighbours, is still a debatable point.

15 Rupam. An illustrated Quarterly Journal of Oriental Art; chiefly Indian. Edited by O. C. Gangoly, Nos. 29 to 32, January to December, 1927.
Contents. The story of Sashi and Punnu by R. K. pp. 70f.

30 H. Frankford. Studies in Early Pottery of the Near East II. Asia, Europe and the Aegean, and their Earliest Inter-relations. (Royal Anthropological Institute, Occasional Papers No. 8) London; pub. by the Institute's Agent, Francis Edwards, London, W. 1 ; 1927. price 12s. 6d.

These studies embrace problems of the potter's art not only in ancient Egypt and Greece, but also its relations with Central European pottery, ceramics of Asia Minor (Syria, Hittites, Hyksos) and even wares of the "Sind" culture lately excavated on the sides of Mohenjo-daro and Harappa (pp. 187 sqq.) A full bibliography includes the work.

The 1st part appeared in 1924, under the sub-title; Mesopotamia, Syria and Egypt and their Earliest Inter-relations (Royal Anthropological Institute; Occasional Papers, No. 6).

Rewied..Revue Archaeolologique 1927, II, Vol. XXVI, p. 303 by S(alomon) R(einach) "etudes originales et suggestives."

17 Annual Report of the Archaeological Survey of India. 1924-25. Edited by J. F. Blakiston. Calcutta. Government of India Central Publication Branch. 1927. Royal 4to. xiv, and 270 pages; xiiii plates. Price Rs. 26-12 or 41s. 6d.

Contents: Section I, Conservation, pp. 1-26.

II. Exploration and research (taxila); Baluchistan explorations of H. Hargreaves; Indus Valley excavations of Sir John Marshall, K. N. Dikshit, and R. B. Daya Ram Sahni.

72 Ancient Sind Cultivation. "Times of India" 12th September, 1927.

93 Prof. M. M. Gidwani, M.A. A story of Ancient Sind, The Mausoleum at Hala. "Daily Mail" Bombay 17th May 1927.

05. Sir John Marshall. Exhibition of Antiquities discovered by the Archaeological Department during the year 1926-27. "The small Exhibition of antiquities which is now on view at 'Dalziel,' consists mainly of small, portable objects recovered by the Archaeological Department during their excavations of the year 1926-27." Mohenjo-daro p.1 Harappa, p. 3; chronology p. 4; culturo, agriculture, p. 5.; Food, Animals, p. 6; Weaving and dress, Personal ornaments, Metals p. 7; Weapons, knives, etc. p. 8; Pottery, writing, inscribed seals p. 9 ; Art, disposal of dead, p. 10 Races, religion, p. 11; Extent of culture, p. 13.

08 Colonel Aubrey O'Brien. Old Ruins by the Indus.

The Times of India Illustrated Weekly, 4th September, 1927, p. 29, with 3 illustrations

A visit to the old fortress "reputed to belong to Rajah Bil and Rajah Til some 25 miles apart" from the Frontier hills near the Indus

14 Fr. W. Freiherr von Bissing. Ein vor etwa 15 jahren "Harappa Siegel." (A Harappa seal acquired about 15 years ago).

Archib fur Orientforschung, Internationale Zeitschrift fur die Wissenschaft Vom Vorderen Orient. Herausgegeben von Ernst F. Weidner, Vol. IV, No. 1, January-February, 1927, pp. 21f. with text illustrations.

Note on a seal of brownish yellow steatite which the author acquired at Cairo about 1912, and which was alleged to have come from Damascus. The object in question exibits exactly the same type as the sealings found at Harappa and Mohenjo-daro. The author ascribes seals of this kind to a Proto-Elamite. Civilisation which flourished in the country of the Indus. "The site of Harappa and Mohenjo-daro seem to have been advanced posts of a culture which is akin to the Susian-Elamite culture, but which is not homogeneous with it." "The unfortunate expression 'Indo-Sumerian' should be discarded; these seals have no affinity either with Sumerian or with Indian culture; they are merely found in a frontier district of modern India."

(Note:—Prof. A. H. Sayce wrote in September 1924; "The inscribed seals or plaques found at Harappa and Mohenjo-daro are practically identical with the Proto-Elamite" tablettes de comptabilite" discovered by DeMorgan

Susa. The form and size of the plaques are the same, the 'unicorns' are the same, and the pictographs are the same. The identity is such that the seals and tablets might have come from the same hand.")

34 Annual Report of the Archaeological Survey of India, 1922-23. Edited by D. Brainerd Spooner, Calcutta, Government of India Central Publication Branch, 1924, Roy 4to. XVIII, 281pp. 42 plates.

Reviewed: J. R. A. S. 1926, p. 764, by L. D. Barnett.

".....Specially noteworthy in recording the initial excavations at Mohenjo-daro, which together with those of Harappa have subsequently revealed such amazing vistas of prehistory, in addition to satisfactory work on the sites of Kuruksetra, Nalanda, Khiching in Mayurbhanj.....and other spots, while in its epigraphic section we may particularly note some corrections to Mr. Jayaswal's reading of the Kharavela inscription."

35 Annual Report of the Archaeological Survey of India, 1923-1924. Edited by Sir John Marshall. Calcutta, Government General Publication Branch, 1926, Royal 4to, X, 238, pp. 43 plates.

Contents: II, Exploration and research (incl. Harappa and Mohenjo-daro) pp. 47-87.

Reviewed: J. R. A. S. 1926, p. 764, by L. D. Barnett.

"the most fascinating paragraphs are those which tell of the now famous discoveries at Mohenjo-daro and Harappa the significance of which is here summarily indicated and of the progress of work on the sites of Taxila, Nalanda, and Khiching."

Journal of Indian History, V. pp. 135-141 by C. S. Srinivasachari; I Sir John Marshall on the excavations in Harappa and Mohenjo-daro.

Quarterly Journal of the Mythic So. (Bangalore), XVII, p. 72 by C.B.

80 Sir John Marshall..Prehistoric India, Sind and Punjab discoveries. A limitless field.

"The Times," London, February 26th, 1926. pp. 15-16 with 8 illustrations on page 18.

Sir John Marshall gives here a short communication on the recent progress of exploration at Harappa and Mohenjo-daro. He points out the great importance of these excavations, and remarks that "it may be imagined how almost limitless is the field awaiting the excavator." The activities of Mr. Sahni, Mr. Dikshit and Mr. H. Hargreaves (the latter in Baluchistan) are also referred to.

221 L. A. Waddell. Indo-Sumerian Seals.

Journal Royal Asiatic So. 1926, pp. 115f.

The author announces a Sumer-Aryan Comparative Lexicon for himself.

222 L. A. Waddell. Indo-Sumerian Seals Deciphered, London, Luzac & Co., 1925; XIX & 146 pages.

Reviewed: Bulletin of the School of Oriental Studies, London. 1926, by R. L. Turner; "We are hurt that in this volume the author has made no acknowledgment of our valuable suggestion, contained in a review of one of his previous fantasies of the intimate connexion between Tibet and top-hats. We shall therefore pass over in silence the no less marvellous discoveries of this volume.

265 Sir John Marshall. On a great civilisation in pre-historic times. By the Editor

Journal of Indian History. V. 1926. pp. 101-106.

The Editor deplores the refusal by the Legislative Assembly of a proposal that an archaeological fund be created by the Government of India setting apart fifty lakhs of rupees as a nucleus for that fund. Extracts from 'The Times' of February 1926, regarding excavations at Harappa and Mohenjodaro.

274 J. Przyluski. Un ancient people du Penjab; les Udumbara; (an ancient people of the Panjab; the Udambara).

Journal Asiatique, Vol. CCVII, pp. 1-59.

Contents: I La route du Gange au Cachemire. p. 3-21.
II. Les etoffes de Kodumbara, pp. 21-25.
III. Kodumbara, Odumbara, pp. 25-36.
IV. Le Monde austroasiatique et la Grece, pp. 36-48.
V. Conclusion. pp. 48-55; liste des mots indo-aryens d'origine anaryenne. Index des noms propres. pp. 56-59.

The Author's conclusions, p. 54-55. "In anticipation of new documents which prehistoric archaeology will certainly yield us, we may previously represent us the events in the following way. The distribution of the Indian peoples before Alexander must have been the result of three successive invasions. First, the Austroasiatics flooded partially the Dravidian element, so that only the isle of the Brahui emerged in the north and the masses of the Dekhan in the South. Then, the Aryans, descended in India from the North West, occupies successively the middle valleys of the Indus, of the Yamuna, and of the Ganges, and spread from the focuses of Brahmanical culture; Lastly, the Bahlikas, coming from the East Iran, mixed with the Austroasiatic tribes which had been left aside by the Brahmans. These merchants and adventurers organised the great confoderations like that of the Salvas and, while their caravans travelled from East to West, they prepared the formation of future empires, and assured the contact between India and the West." These conclusions are supported by numerous philological arguments.

295 Ramprasad Chandra. The Indus Valley in the Vedic Period. Memoirs of the Archaeological Survey of India No. 31 Calcutta. Government of India Central Publication Branch. 1926. Price Annas 8; or 10d.

188 R. K. The story of Sashi and Punnu.
Rupam, No. 30. April 1927, pp. 70ff, with 2 illustrations and 1 plate.

The author identifies two miniatures, one in the collection of Professor W. Rothenstein, and the other of Mr. Samarendra Nath Gupta, as representations of the popular love story of Sashi and Punnu. It is most interesting to have the same subject in the representation of two schools, *viz.*, that of Kangra and that of Moghul Court art.

228 L. A. Waddell... The Aryan origin of the Alphabet; Disclosing the Sumero-Phoenician parentage of our letters ancient and modern. London Luzac & Co. 1927. 8vo. VIII, 80 pages, with 4 illustrations.

The author who in a former book already tried to prove that the "Aryan-Phoenician" language is identical with an "early Briton" idiom, now "proves", using a similar method, that the letters of all the alphabets should be derived from the Sumerian pictograms.

Cp. An. Bibl. I. A. 1926. No. 222 and Introduction p. 4.

1928.

19 Daji N. Apte. Hindi-Sumaeri-Samskriti. (In Marathi) Poona. The Chitra Shala Press, 1928. Price Re. 1.

Reviewed: The Modern Review, 1928, p. 655, by V. G. Apte.

"The excavations made at Harappa and Mohenjo-daro in Sind....go to establish closest resemblance between the Sumerian and the ancient Indian civilisation, both having a common stock of inheritance in the Vedas. Mr. Apte taking a cue from those discoveries has pursued his study of the Sumerian civilisation and as its result has produced this book which is brimful of interesting information."

55 Annual Report of the Archaeological Survey of India, 1925-26. Edited by J. F. Blakiston, Off. Director General of Archaeology in India.

Contents: Section I, Conservation, pp. 2-55. II. Exploration and Research pp. 55-130. (Excavations at Ahar, Bulandshahr by Madho Sarup Vats; A Buddhist Stupa exposed by erosions of the River Indus, Rokhari, Mianwali District by the Same; exploration in Baluchistan, especially at Nal, in Jhalawan, by H. Hargreaves; Mohenjo-daro by Sir John Marshall, Ernest Mackay, R. B. Daya Ram Sahni, K. N. Dikshit's research for further prehistoric mounds in neighbourhood of Mohenjo-daro.

87 R. D. Banerji, M.A. India in the copper age (in Bengali).

Visal-Bharat, Vol. I, Part I, No. 1, January 1928—Magh 1984) pp. 33-40, with 7 text illustrations.

Note on the chalcolithic civilisation of the Indus Valley and the excavations of Mohenjo-daro.

95 R. B. Ramprasad Chanda. The Indus Valley in the Vedic Period. (Calcutta, 1926).

Reviewed: Indian Antiquity, Vol. LVII (1928), p. 35. By C. Oldham:

"The author of this memoir discusses, not inopportunely, certain words and passages occurring in the Vedic literature with reference to recent discoveries in the Indus Valley with the object of facilitating the co-ordinations of archaeological data with ancient literary evidence."

119 Importance of finds at Mohenjo-daro.

The Modern Review, 1928, pp. 597f.

Quotes a paper published by Sir Arthur Keith in the *Referee* adding some observations.

123 Sir John Marshall. A new chapter in Archaeology; The Pre-historic civilisation on the Indus.

The Illustrated London News, January 7th, 1928. pp. 12-15, and 32 with 18 illustrations; the same, January 14th, 1928, pp. 42-45 and 78, 80, with 17 illustrations.

126 Sir John Marshall. India 5,000 years ago, Mohenjo-daro. The Excavated cities. Art and culture on the Indus.

The Times, London. January 4th, 1928, p. 13; and January 5th, 1928. 2 illustrations, on p. 16.

For similar articles, cp. also.

Madras Mail, 16th January, 1928; Times of India, Bombay, 4th January, 1928, Bombay Daily Mail, 4th January, 1928.

129a Sir John Marshall, Ernest Mackay and R. B. Daya Ram Sahni, Mohenjo-daro. An. Report Arch. Survey, 1925-26, pp. 72-98 plates, XVI-XLVI.

Cf. An. Bib. I. A. 1926, pp. 1-5, plates I-V, and 1927, pp. 1-6, fig. 1-4 and plates I-II, where an account is given of the chief results of these excavations.

141 Sir Aurel Stein. An Archaeological Tour along the Waziristan Border. The Geographical Journal, London, April 1928, pp. 378-80.

"My object was a systematic survey" writes Sir Aurel Stein "accompanied where advisable by trial excavations of such ancient sites in the border regions between India and Iran as are likely to throw light on the connection of the prehistoric civilisation which the excavations at Mohenjo-daro and elsewhere in the lower Indus valley have revealed with corresponding cultures traced westwards in Persia and Mesopotamia." Between Draband and Tank the mounds seem to bury remains of early historical times separating the Indo-Scythian period from the chalcolithic culture. To the same period may be assigned the mounds near Spinwam and near Shahidan. To the chalcolithic period belong the sites in the vicinity of Fort Sandeman (Zhob Agency): at Rana. ghundi (Bori Tahsil, Loralai Agency); the great mound near Dabarkot and at Sur-jangal. A Kushan Buddhist stupa has been cleared completely at the entrance of the Ṭhal plain. Some ruined mounds in the Pishin basin supplied finds of different periods, including ceramic wares of the Sassanian period.

1929.

18 Prof. V. Gordon Childe. The most ancient East; the Oriental Prelude to European Prehistory, London, Kegan Paul 1928; IV and 258 pages, 24 plates, one map and 86 text illustrations, price 15s.

Reviewed: The Asiatic Review, 1929, pp. 350 f. Burlington Magazine, 1929, I. p. 280 by E. B. "deals with the prehistory of Egypt, Sumer and Indus valley...." Asiatica. II. pp. 3f. "the illustrations are excellent." Man,

1929, pp. 91f. by a Murray: "it is given to few men to seize the essentials in so complicated and involved a subject and place them plainly before a reader in the way that Prof. Childe has done so brilliantly. The chief fault of the book is the want of adequate maps."

83 R. S. Vaidyanatha Ayyar, B. A. The Sumero-Dravidian and the Hittite-Aryan Origins.

Quarterly Journal of the Mythic So. Bangalore Vol. XIX, pp. 294-313 with 2 sketch maps and 6 illustrations.

After having compared the Sumerian civilization of Babylonia and that of the Indus valley recently discovered, the author tries to collect evidence in support of Prof. Hall's hypothesis that the Sumerians were of Indian origin. Secondly he attempts to show at the hand of mythological, philological and ethnographical evidence that there was a close family connection between the Hittite and the Aryan culture.

94 Prof. Barton. The so-called Indo-Sumerian Seals.

In Annual of the American Schools of Oriental Research, Vol. VIII for 1926-27 New Haven; Yale University Press;

Reviewed: Journal Royal Asiatic So. 1929, pp. 881f. by C. G. (add).... "he presents nearly all that was known at the time of writing, though he is not, of course, in a position to add anything much towards their actual decipherment.

104 A Coomaraswamy. A very ancient Indian Seal.

Boston Btin. XXVII, pp. 28-29, with 2 figures.

An Indus valley seal of Mohenjo-daro type, obtained in India in 1910 or 1912 by a coin dealer, now preserved in the Boston Museum.

108 Henry Cousens. The Antiquities of Sind with historical outline. (Arch. Survey of India Vol. XLVI, Imperial Series) Calcutta. Price Rs. 44-14).

From the preface "The explorations described in the following pages were made some years ago when funds for exacavation purposes were very limited; and their publication was postponed during the war"....

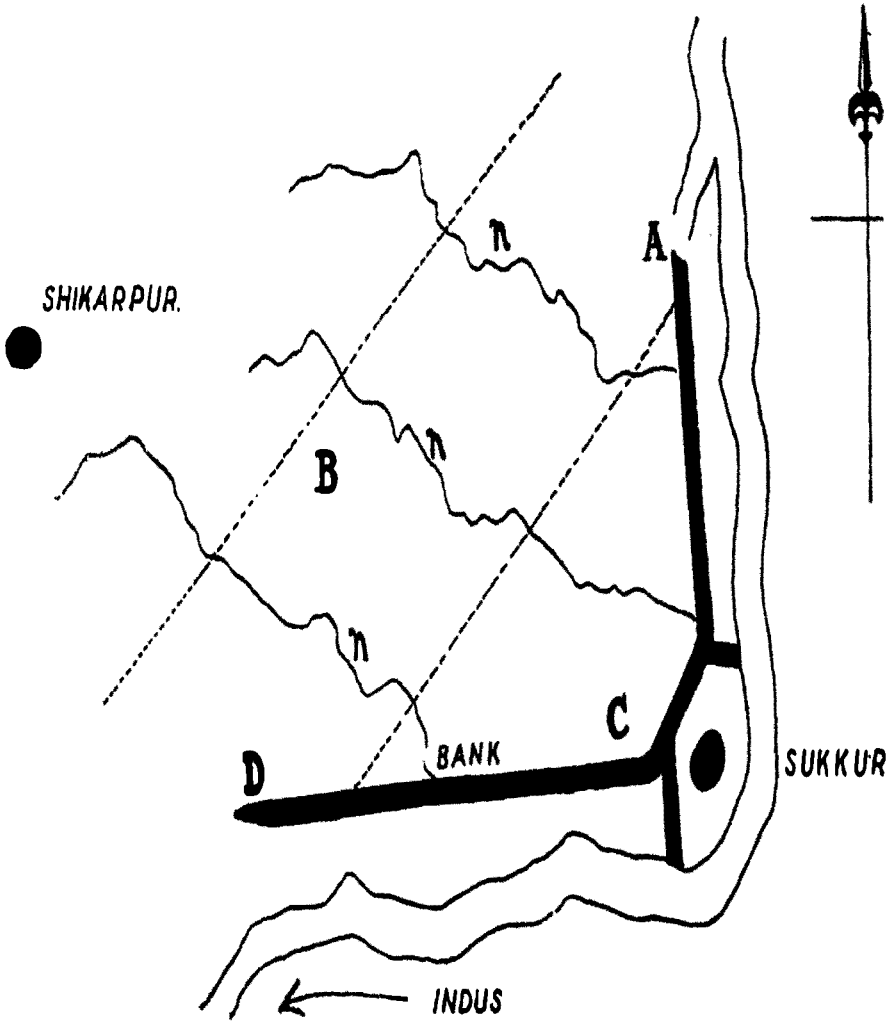
Contents: Sind, its rivers and antiquities. Outline of the history of Sind. Prehistoric remains and rude stone monuments. Remains in geographical orders. Miscellaneous remains. Ancient coinage of Sind (no index), plates.

144 Sir Aurel Stein. On Alexander's Track to the Indus.

Personal narrative of explorations on the north-west frontier of India, carried out under the orders of H. M. Indian Government, London; MacMillan & Co. 1929, Medium 8vo. XVI and 182 pages with 98 illustrations and two folding maps. Price 21s.

This is a personal narrative of Sir Aurel Stein's tour in 1926, an account of which was published in our An. Bibl. I.A. 1926, pp. 6-10 and pl. VI. The official memoir on the same tour will be published in 1930. Brief scholarly accounts were published in the Geographical Journal, 1927, pp. 417-440 and 515-540.

SUKKUR BUND



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(RE-PRODUCED FROM SIR. CH. NAPIER'S LIFE., VOL. III. P. 315)

Reviewed: Indian Antiquity, LVIII, pp. 219f. by C. E. A. Oldham;...." a fascinating account of this tour of exploration as a whole, a tour that will rank as one of the most prolific in results of value to scholars ever accomplished in so short a time."

Asiatica, Vol. II, pp. 134f.

Luzac's Vol. XL, p. 183"....The book, it may be added, is illustrated by numerous photographic plates, most of which are exceptionally fine."

Journal Royal Asiatic So. 1929, pp. 926f. by G. L. M. Clauson. "it would be difficult to make out a more complete case and the identifications carry complete conviction."

Journal des Savants: 1929, pp. 69-73, by Georges Radet; "En somme, de toutes les hypotheses emises ay sujet d'Aornos l'assimilation avec Pir-Sar est celle qui reunit les plus de garanties."

Journal Central Asian So. Vol. XVI, pp. 405f. by P. M. Sykes; "None of Sir Aurel's works are written in so happy a vein."

The Northern Whig and Belfast Post, June 15, 1929.

144a Sir Aurel Stein. Alexander's Campaign on the Indian North-West Frontier. Notes from explorations between Upper Swa and the Indus.

Indian Antiquity, Vol. LVIII, Supplement, pp. 1-32, with 7 plates.

329 Ramaprasad Chanda, R. B.... Survival of the Prehistoric Civilisation of the Indus Valley. (Memoirs of the Arch. Survey of India, No. 41), Price Re. 1-2.

The author examines the Rugveda and compares it with what is known of the 'Indus' civilisation. His chapters are inscribed: Arya and Dasa; Priest and King; Human sacrifice Anumarana (following the husband to death in symbolic fashion); the Vratya and Yati (non-Brahmin magician priests) the Tree and the Animal Standard—Two of the Rai Bahadur's conclusions are: "(1) The religion of the Rishis was quite different from the original religion of the kings and chiefs of the Indus valley....(2) When the Kings of the Indus valley first came in contact with Rishis, the indigenous civilisation of the land was evidently in a state of decline and the kings and the peoples were losing their old faith in their own gods and their own rites."

There was a fundamental difference of opinions between Brahmans and Ksatriyas, e.g. in the matters of human sacrifice of anumarana, etc.

Reviewed: The Englishman, Calcutta, October 11th, 1929. Civil & Military Gazette, Lahore, November, 11, 1929. The Pioneer, Allahabad, November 10th, 1929. (see No. 346 of 1930).

419 (Arrianus). Flavii Arriani quae exstant omnia, edited A. G. Roos. Vol. II; scriptia minora et fragmenta; Lipsiae; Teubner, 1928. Price Mark 12.

Reviewed: Museum, Vol. 36. columns 202-204 by Dr. U. Ph. Boissevain. (in Dutch);

"......prolegomena on the subsidia critica are given before the text. An index autorum and a brief index nominorum et rerum, then a conspectus fragmentorum besides three maps (two of the journey of Nearchus in the Indian Ocean and in the Persian Gulf; one of the Periplus), complete this excellent edition."

581 George A. Barton. Whence came the Sumerians?

Joutnal of the American Oriental Society, Vol. 49, 1929, pages 263-268.

The most probable theory in the Author's view is that "the Sumerians were themselves descended from the dolicho-cephalic men of palaeolithic time, who had survived in some mountain fastness far from the Hamitic-Semitic centre, and had developed an entirely different language.

40 Annual Report of the Archaeological Survey of India, 1926-27.

Contents: I. Conservation, pp 1-50; II. Exploration and research, pp. 51-183 (The Indus culture by Sir John Marshall; Mohenjo-daro by Daya Ram Sahni; Mohenjo-daro "L" area by Ernest Mackay.

99 Hargreaves, H. Prehistoric sites; archaeological survey excavating buried cities.

The Times, February 18, 1830.

On the excavations at Mohenjo-daro and Harappa, and other works of the Archaeological Survey of India.

109 Mackay Dorothy. The Indus Valley Excavations.

The Statesman, Calcutta, January 12, 1930, with three illustrations.

On the work done at Mohenjo-Daro.

110 Mackay Ernest. Mobenjo-Daro "L" Area.

Archaeological Report Archaeological Survey of India, 1926-27; pp. 89-97, plates XV-XIX. See No. 127 below.

112 Marshall, Sir John. Prehistoric man; crafts of the Ancient East—An "imported" head?

The Daily Telegraph, February 24, 1930.

Resemblance between the Indus sculptures and a head found by Professor Langdon at Kish.

113 Marshall, Sir John. The Indus Culture.

Archaeological Survey, Annual Report, 1926-27. pp. 51-60.

Account of the early chalcolithic civilisation revealed by the excavations at Mohenjo-daro and Harappa.

127 Sahni, Rai Bahadur Dayaram. Mohenjo-daro.

Annual Report, Archaeological Survey of India, 1926-27, pp. 60-68, plates X-XIV.

Account of the excavations conducted at Mohenjo-daro during the cold season of 1926-27. (see. No. 110 above).

139 Venkateswara, S. V. The antiquities of Harappa and Mohenjo-Daro.

The Aryan Path, Vol. I, No. 1, January 1930. p. 11-15.

"If the culture of the finds has to be carried back to the fifth millenium B.C. it is interesting that already in that age we seem to have evidence of a blend of Aryan and non-Aryan cultures."

346 Chanda, Ramprasad, R. B., B.A. Survival of the Prehistoric Civilisation of the Indus Valley.

(Memoirs of the Arch. Survey of India, No. 41, Price Re. 1-2-0). See No. 329 above of 1929.

Reviewed: Indian Antiquity. Vol. LIX, by C. Oldham.

"We feel that the author attempts in this short "Memoir" to solve too many difficult problems, though his views, if not convincing, are in many respects suggestive."

Journal Royal Asiatic Society 1930. pages 398f. by L. D. Barnett;

"This is an able and arresting monograph, although it does not carry conviction on all points."

349 Chaudhuri, H. C. Ray. A note on the chronological relation of Kaniska and Rudradaman I.

Indian Historical Quarterly Vol. II. No. 1, pp. 149-152.

"The facts noted above indicate that the Saka sect to which Castana and Rudradaman belonged came from Sakasthana in Iran through the Lower Indus Valley to Cutch and other places in Western India. . As the great Satrap retained his hold on (Sindhu and Sauvira) till 150 A.C., it stands to reason that he was their ruler from Ac. 136A. C."

479 Stein, Sir Aurel. Alexander's campaign on the Indian north-west frontier. Journal Central Asian Society Vol. XVII, pl. 147-170.

A lecture recording a travel in research of the routes and places of Alexander's campaign in the valleys north of the Kabul River.

763a Stein Sir Aurel. An Archaeological tour in Waziristan and Northern Baluchistan. With an appendix by Professor Stein Konow. (Memoirs of the Archaeological Survey of India, No. 37). Price Rs. 13-14-0.

From the introduction: "The interests of history, georgraphy, archaeology combined have drawn me for many years past towards those border regions which since recent times have witnessed the interchange of the civilisations and ethnic elements of India and Iran. The excavations carried out under Sir John Marshall's direction at the prehistoric sites of Mohenjo-daro and Harappa.... and those subsequently undertaken by Mr. Hargreaves in Kalat territory....had brought to light remains of a prehistoric civilization unmistakably pointing to links with that of a very early period traced in Mesopotamia and at sites of, or near, Iran such as Susa, Anau, and Sistan. It scarcely appears to have been adequately realized that the mention....of the Krumu and Gomati of the Rigveda(X. 75)....identical with the present Kurram and Gumal rivers, both comparatively small.... suggests such acquaintance with Waziristan as only prolonged occupation by Aryan tribes of the early Vedic period is likely to account for....The special attention thus drawn to the area separating the lower Indus from the head of the Persian Gulf, induced me (to undertake)....a general survey, determining the general character and the approximate epoch of each site examined. The (Sistan) remains of painted pottery dating from

chalcolithic times show indeed a very striking resemblance to our corresponding relics from early Baluchistan mounds."

Contents: I. Remains of the Waziristan Border. II. Prehistoric remains in Zhob. III. Ruined sites of Loralai District. IV. Old remains of Upper Zhob and Pishin. App. Note on Tor-Dherai Inscriptions. On several sites Buddhist remains of the Kushana period were found. especially at Tor-dherai.

1931.

6 Antiquity. A Quarterly Review of Archaeology, edited by O.G.S. Crawford, F.S.A. Vol. V. Gloucester; printed by John Bellows; 1931 Royal 8vo. and 540 pages, with numerous plates and text illustrations.

Contents: Excavations at Susa (Persia), 1930-31 by P. Mecquenem, pp. 330-343. Further links between Ancient Sind, Sumer, and elsewhere, by Ernest Mackay, pp. 459-473. Book reviews.

12 Journal of the Royal Asiatic Society of Great Britain and Ireland for 1931. Published by the Society, London, W. 1. 8vo. 1006 and XX pages, with 7 plates and 35 text-illustrations. Price 15s. each of the four parts or £2-8s. a year.

Contents: The script of the Indus Valley Seals by Pran Nath. pp. 671-674.

60 Annual Report of the Archaeological Survey of India. 1927-28. Edited by H. Hargreaves, Off. Director General of Archaeology in India. Calcutta. Government of India Central Publication Branch 1931. Royal 4to. XIII and 206 pages. with LVII plates. Price Rs. 16-8-0 or 26s. 6d.

Contents: I. Conservation pp. 1-53. II. Exploration and research pp. 54-135. (Excavations at Taxila, by John Marshall; at Mohenjo Daro by E. J. Mackay; at Jhukar by N. G. Majmudar; at Harappa by Madho Sarup Vats.

90 Brailsford, H. N. Buried Cities of the Indus.
Listener, London, July 8, 1931.
The Statesman, Calcutta, August 9 1931.

91 Brailsford, H. N. Earliest India; the buried cities of the Indus,
Manchester Guardian, December 15 and 16, 1931.

I. Accepted views revolutionized. II. Art, Religion and Commerce, Views of Archaeologist "Heretics" justified.

97 Consens, Henry. The antiquities of Sind. with Historical Outline. 1929. See Annual Bibliography of Indian Archaeology, 1929. No. 108 and 1930, No. 85.

Reviewed: Journal Royal Asiatic Society. pp. 703-706 by C. E. A. W. (Oldham); "The author is to be congratulated on the excellence of the numerous drawings and of many of the photographs especially those in colour....."

Indian Antiquity, Vol. LX, pp. 18-20, by C. E. A. Oldham,

101 Duncan, Arthur. The Indus Civilisation; Mohenjo-daro and Harappa. India, October 1931. pp. 836ff. with 3 illustrations.

107 Gyani, R. A., M.A. Prince of Wales Museum of Western India; A guide to the Gallery of Miscellaneous Antiquities, Bombay. Government Central Press, 1931, 8vo. V and 14 pages, 15 plates.

"In asmuch as this Guide is meant for reference while going round the Gallery, it has of necessity to be in an abridged form. Scholars.....will, however, find reference which would help them in their further study and research."

Contents: (1) Pottery from the ruins of different Buddhistic Stupas in Sindh; (2) Carved bricks from the Stupas, excavated in Sindh. (3) Heads, images and other antiquities of the Pre-Islamic age, from South Arabia. (4) Arabic Medicinal Talismanic Cups. (5) Enamelled tiles from different Protected Monuments in Sindh. (6) Mr. G. E. L. Carter's collection of fragments of glazed pottery and porcelain models. (7) Miscellaneous exhibits.

114 Keith, Sir Arthur. When our civilisation began; an amazing find in India. On the finds of Mohenjo-daro.

118 Mackey, E. J. H. Excavations at Mohenjo-daro.

Annual Report Archaeological Survey. 1927-28, pp. 67-76 with five plates.

During 1927-28 excavations were carried out in two areas; (1) a large expanse of untouched ground lying between the stupa buildings and the Great Tank, including some Buddhist remains of the time of Vasudeva I, and an interesting bathing house probably used by priests for ablutions; (2) in the Dk. area, the excavations revealed what appears to be a potters' quarter, comprising numerous poorly built houses, four petty kilns, etc.

119 Mackay, Ernest. Further links between Ancient Sind, Sumer and elsewhere. Antiquity, Vol. V, pp. 459-473 with 10 figures.

Mr. Mackay gives here a large number of comparisons between objects of Mohenjo-daro and Western Asia, such as beads, svastika, motif, clay toys and figures, etc. He concludes with these words;

"These additional facts together wth the connexions already pointed out in the book (*i.e.*, Mohenjo-daro and the Indus Civilization) prove beyond question that the upper occupations at Mohenjo-daro are contemporary with the earlier ones of Ur and Kish. We have assigned the somewhat conservative date, 2750 B.C. to the upper levels of Mohenjo-daro, but we may have to increase it in view of the many connections between that place and the early period of Kish and Ur."

120 Majumdar, N. G. Excavations at Jhukar. Annual Report Archaeological Survey, 1927-28, pp. 76-89 with four plates.

The importance of these excavations, though they have been carried out only on modest scale, lies in the fact that the two mounds of Jhukar (Jhukar-Jo-daro) are situated only 16 miles north of Mohenjo-daro, and that both contain antiquities of the same chalcolithic civilization as Mohenjo-daro

and Harappa. The trial trenches dug by Mr. Majumdar revealed three distinct strata the topmost layer yielding remains of the Gupta period (not earlier than the 5th century A.D.) while the third stratum contained prehistoric antiquities (copper and stone implements, pottery, pictographic seals, etc.) entirely identical in type wih those of the Indus valley civilisation.

120a Marshall, Sir John, C.I.E., litt., D., Ph.D., F.S.A., etc.

Mohenjo-daro and the Indus Civilization. Being an official account of Archaeological Excavations at Mohenjo-daro carried out by the Government of India between the years 1922 and 1927. Edited by Sir John Marshall etc. 3 vols. London; Arthur Probsthain, 1931. Royal 4to. XXVII, XIII, and 716 pages, 164 plates, 2 golding maps in colours, 51 text-illustrations. Prices, £12-12-0 equal to $61 or Swiss Frs. 315.

Sir John Marshall contributes to these volumes the chapters on the country, climate, and rivers; the site and its excavation; the buildings; other antiquities and art; Religion ; Disposal of the dead; Extent of the Indus Civilization; the age and authors of the Indus Civilisation; the Stupa Area. Other contributions are:

Mr. Ernest Mackay, M.A., F.S.A., who writes on the S.D. area; and L. area, and D.K. area; Architecture and Masonry; Plain and Painted Pottery with Tabulation; Figurines and Model Animals; Statuary. Faience and Stone vessels; Seals, Seal Impressions; and copper Tablets with Tabulation; Household Objects; Tools and Implements; Technique and Descriptions of Metal Vessels, Tools, Implements, and other objects; Personal Ornaments; Games and Toys; Ivory, Shell, Faience, and other objects of technical interest.

Mr. H. Hargreaves contributes a chapter on the H.R. area; Rai Bahadur Daya Ram Sahni on the H.R. area, Section B, and on V.S. area. The Indus Script is dealt with by Mr. C. J. Gadd, M.A., F.S.A., Mr. Sidney Smith, M.A., F.S.A., and Professor S. Langdon, M.A., Ph.D., Mr. Muhammad Sana Ullah, M.A., B.Sc., writes on sources and metallurgy of copper and its alloys. Colonel R. B. Seymour Sewell, M.A., Sc.D., F.A.S.B., and Mr. B. S. Guha, A.M., Ph.D., on Human and Zoological Remains; Sir Edwin Pascoe, M.A., Sc.D., F.G.S., F.A.S.B. on Minerals and Metals, and Mr. A. S. Hommy, B.A., M.Sc., on the system of Weights at Mohenjo-daro.

Cf. Annual Bibliography of Indian Archaeology, 1926, pp. 1-5, plates I-V and 1927 pp. 1-6 plates I-II where two brief accounts have already been given of the excavations then in course. The present monograph in 3 large volumes sums up in detailed accounts all the results of the investigations of the contributors. Every important object found is illustrated in the plates and discussed. All efforts to decipher the pictographic script of Mohenjo-daro have failed so far, but there is an exhaustive discussion and a full list of all inscriptions found, also a Sign List, containing all the signs occurring in the texts with full references. The date assigned to the site by Sir John Marshall is between 3250 B.C. and 2750 B.C. and he insists on the essential differences of this civilisation and that of the Vedic Aryans, who must have come to India in the latter half of the second mil-

lennium B.C. As to the race of the inhabitants of Mohenjo-daro, the author's concluding words are: "It would obviously be very rash in the present uncertain state of our knowledge to endeavour to identify as "Dravidian" either the skulls classed by Colonel Sewell as Proto-Australoid, or those classed as Mediterranean: rasher still to identify any of these skulls as "Sumerian." There are however many proofs of an intercourse between Mohenjo-daro and Elam and Sumer, which are summed up on pp. 103-105.

Reviewed: Journal of Indian History, (Madras) Vol. X, pp. 307-309, by C.S. Srinivasacharyar; "An epoch-making work....The long expected publication....on which Sir John Marshall, late Director General of Archaeology in India, was engaged for several years, has at last been brought out in three sumptuous and magnificently illustrated volumes....As Sir John points out, this book should, more than any other, serve to dispel the notion that the pre-Aryan peoples of India were altogether on a lower plane of civilization than their Aryan conquerors."

122 Metta, Vasudev, B. A long-forgotten civilization in India; Discoveries of Cities from five to six thousand years old. The World to-day, Vol. LVIII, No. 1, pp. 1-7, June 1931, with 5 illustrations.

On the excavations at Mohenjo-daro and Harappa, and Sir John Marshall's view regarding the Indus civilization.

137 Shanta Devi. Our Country 5,000 years ago. In Bengali Prabasi. Vol. XXXI, part 2, number 3, pp. 375-386, with ten illustrations.

A brief account of excavations at Mohenjo-daro.

142a Stein, Sir Aurel. An archaeological tour in Waziristan and Northern Baluchistan. Calcutta, 1929 (published 1930) See Annual Bibliography of Indian Archaeology, 1930, No. 763a, under Addenda, p. 138.

Reviewed: Journal Royal Asiatic Society 1931. p. 938f. by Jarl Charpentier; "Though the very limited time seems to have made it possible to Sir Aurel Stein to undertake systematic excavations only on a minor scale, there can be little doubt that among these finds there are several which seem apt to establish a link between the pre-historic civilization of the Indus valley and those of more Western countries."

Madras Mail, February 24, 1931.

Hindu, Madras, April 12, 1931, by K. A. Nilkantha Sastri.

144 Stein, Sir Aurel. On Alexander's track to the Indus.

London, 1929. See Annual Bibliography of Indian Archaeology, 1929. No. 144. Reviewed: Orientalistische Literarturzeitung, 1931, columns 571-572, by H. Beroe.

232 Nath, Dr. Pran, D.Sc., Ph.D. The Scripts on the Indus Valley Seals.

With an appendix (containing extracts from the Sumerian and Indian literature throwing light upon the words occurring in the inscriptions of the Indus Valley, Elam, and Crete), Indian Historical Quarterly Vol. VII, Supplement pp. 1-62.

From the Preface, "My researches have convinced me that what have been previously regarded as pictographs or idiographs are actually letters or monographs based on characters."

Contents:—The signs of the Indus seals and their classification on a syllabic base. Ancient Indian punch-marked coins. Decipherment of the linear inscriptions. A glance at the proto-Elamite and Minoan inscriptions. The Indus culture. Names of gods and goddesses occurring in the Indus incriptions.

232a. Nath Pran. The Script of the Indus Valley Seals.

Journal Royal Asiatic Society, 1931, pp. 671-674, with two tables.

The author believes that the Indus Valley scripts consists of letters (*not* idiograms) closely connected with Brahmi.

379. Majumdar, R. C., M.A., Ph.D. The Arab Invasion of India.

Journal Indian Historical Society, Vol. X, Dacca University Supplement, pp. 1-60.

"In the following pages....an attampt is made....to reconstruct the history of....the Muhammadan conquest of India....(by) a critical study of the Muhammadan chronicles with the help of such Indian documents as are available to us."

Contents: (i) The western border-land of India on the eve of the Arab invasion. (ii) sources of information about the early Arab raids. (iii) raids against Kabul and Baluchistan. (iv) the Kingdom of Sind on the eve of the Muhammadan conquest. (v) Retrospect. Appendix.

398. Padmanabhayya, A. Ancient Bhrgus.

Journal of Oriental Research, Madras, Vol. V, pp. 55-67 and 80-100.

The author propounds the theory that the Brigus were Dravidian race, related with the ancient Elam and Mesopotamia "the connecting link between the Semitic and Aryan element."

423. Ray, H. C., M.A., Ph.D. The Dynastic History of Northern India (Early Mediaeval period). With a foreword by L. D. Barnett. Vol. I, Calcutta. University Press, 1931. Imperial 8vo. lx and 663 pages, with 10 maps in the text and a folding map.

From the Preface: "In the present work an attempt has been made to giva an account of the dynasties that ruled in Northern India during the period of transition intervening between the decline of the Gurjara-Pratihara empire and the Muslim conquest, ca. 916-1196 A.D. The first two volumes ....contain the political history of the "Dynasties." The third volume which is in course of preparation will deal with the following topics; Administration; Economics; Social and Religious History, Literary History, etc."

Contents of the first volume: Sind; Sahis of Afghanistan and the Punjab. Kashmir, Nepal, Assam, Bengal and Behar. Orissa, Gahadavalas (Gahar-

wars) of Varanasi and Kanyakubja, Rastrakutas of Northern India. Later Gurjara-Pratiharas of Kanauj. Coins of the Arab Governors of Sind. Coins of the Sahis.

742. Langdon, Prof., S. A New Factor in the Problem of Sumerian Origins.

Journal Royal Asiatic Society, 1931, pp. 593-596, with two text illustrations.

Once more a seal of the early Indus Valley civilisation has been found in Mesopotamia, this time 9 metres below the surface, at Kish; it may be dated as contemporary with Sargon of Agade. "It is wholly impossible to explain the presence of this ancient Indian script on a press seal of 2800 B.C." says Professor Langdon, "unless it be admitted that the script was known in this period. In other words, native Indian seals.... occur in the age immediately before Sargon; the script was known in Sumer in the early period only, and remains absolutely unchanged. Now several hundred of these seals have been excavated at Mohenjo-daro and Harappa, in the Indus Valley, and they also show no evolution in epigraphy, although found at different levels."

"But all this raises the question as to whether the Sumerians are not really the Indus Valley people themselves." The writer however does not feel justified to give a definite answer: "Facts and facts only must be published until some reasonable and defensible history can be based upon them."

ANNUAL BIBLIOGRAPHY OF INDIAN ARCHAEOLOGY
1932

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THE INDUS CIVILIZATION AND THE NEAR EAST.

The present essay deals with but one aspect of the astonishing discoveries made by Sir John Marshall and his collaborators in the Indus Valley.(1). It is the close affinity of the newly discovered civilization with those of the Ancient Near East which concerns us here. A connexion has been proved to exist. It is of importance to establish its nature since it may have a very direct bearing on the history of the West.

The Ancient Near East is a well-defined historical entity. There is the fourth millennium B.C. starts the continuous development of which our own civilization presents the most recent stage. The populations of the Nile Valley, Mesopotamia and the coastal regions of the Eastern Mediterranean broke away from the stagnation of the neolithic peasant culture which had prevailed for untold centuries from the coasts of the Atlantic to the Bering and China Seas. Shortly before 3000 B. C. we observe an accelerated development which left the periphral regions—Europe, Central Asia, Africa beyond Egypt—far behind. There can be no doubt, however, that the Indus Valley must henceforward be considered as part of the civilized world of the third millennium B.C.

In order to co-ordinate the new knowledge with the established history of the Ancient Near East, we have to fix with some precision the age of the Indus civilization, or rather of that stage of its development which the excavations have revealed. For the chronological problem is considerably simplified by the fact that the deposits contain throughout remains of a homogeneous civilization—in other words, only one stage of its development is known to us. Unfortunately imported objects from better known regions have not been found so far at Mohenjo-daro or Harappa; consequently the age of the remains was left uncertain.

Comparisons made between the painted pottery from India, and various fabrics from Persia and Mesopotamia were ill-founded from the first and have since been proved to be entirely misleading. Summarising the outcome of an argument which it would be tedious to repeat here (2), we may state that the painted pottery found in India is the product of an entirely local development, in which traditions of a more ancient ceramic art are incorporated. In the Iranian Highlands these traditions go back to the earliest periods known. In Western Persia and Mesopotamia we meet with numerous local varieties as well as with different stages in the development of this Highland pottery. The Indian wares have been proved to be contemporaneous with one of the late survivals of this Iranian Highland ware in the West. But the survivals in Persia and India of this ancient tradition show little or no resemblance, since they are separated from their common origin by many centuries of independent development.

Another intrinsic indication of the age of the Indus civilisation has been found in the total absence of iron. But we can hardly go further, on the strength of the evidence, than to say that, it flourished before the latter half of the second millenium B.C., especially as both copper and bronze were in use in Mohenjo-daro. The introduction of bronze to common use seem to vary in different regions. In Mesopotamia it has been proved to occur in the first centuries of the third millenium, namely

in the Royal Tombs at Ur where copper however remains more common for tools and weapons. Exactly the same situation was disclosed in our own work at Tell Asmar where it bears on Sargonid and Early Dynastic Times (3). The occasional use of bronze at Mohenjo-daro need not, therefore, be considered as proof of a late date. On the other hand, Sir John Marshall uses the term chalcolithic and thereby suggests too early a date for his discoveries. Unless the use of this term is confined to the transitional stage of civilization in which most implements were still made of stone, while copper was beginning to come into use, it loses all meaning and usefulness. The actual occurrence of stone implements in a layer does not however mark it as chalcolithic. The continued use of stone for ritual implements is well known. The present writer found in the Akkadian city at Tell Asmar (2500 B. C.) not only finely made flint arrow-heads in use alongside of an extensive series of copper tools and weapons, but also ordinary chert, flint and obsidian flake knives turned up in considerable quantities. Even in Tell el Amarna a city in Egypt which antedates by only two centuries the introduction of iron into common use, some flake knives were found at not infrequent intervals. However, the stone work at Mohenjo-daro does afford some evidence as to its age. The total absence of the so-called "sickle-teeth," flat saw-edged flints set in bitumen in wooden sickle handles, suggests that the chalcolithic age lies a considerable distance back in the past.

Summing up we may say that there is no intrinsic evidence by which the Indus civilization can be dated.

Soon after the first publication of the Indus discoveries, however, Mr. Mackay drew attention to the occurrence of imported Indian object in Mesopotamia (4). And since then some six or seven stamp-seals and some etched carnelian beads have been reported from that country (pp. 496, 423) while recently Mr. C. J. Gadd published no less than eighteen Indian seals found in the excavations at Ur alone (Proceedings of the British Academy, Vol. XVIII, London 1933). It so happens however that not one of these objects was properly dated by the circumstances in which it was found.

Unequivocal evidence, however, was obtained in January 1932 in the excavations which the present writer is directing for the Oriental Institute of the University of Chicago. The objects shown in Plate I (left side) were found in a well defined archaeological stratum at Tell Asmar, the site of ancient Eshnunna, fifty miles to the north-east of Baghdad, in what is now total desert. The objects depicted in the right half of the same plate are re-produced from the Mohenjo-daro volumes. The Indian origin of the Mesopotamian finds is evident, the more so as no parallels exist from other Mesopotamian sites. Since the matter is of paramount importance, the circumstances in which these objects were discovered are worth describing here (5).

The low ridges on the northern outskirts of Tell Asmar cover private houses dating from the time of the Dynasty of Akkad (about 2500 B.C.) This is proved by a wealth of evidence comprising not only cylinder seals and pots, but also tablets and seal-impressions, one of which actually mentions Shu-dur-ul, the last king of the dynasty. Now in these houses and among those objects, which are in no way exceptional, the objects shown in our plate I (left side) were discovered.

Most striking amongst these is the cylinder seal of which an impression is shown here. The subject establishes at once its non--Babylonian character, not only because it is without parallel among the thousands of known seal cylinders, but also because the animals foreign to Babylonians, were obviously cut by an artist to whom they were familiar. Moreover, no Babylonian seal of this quality shows so unbalanced a composition.

But we can go even further; certain peculiarities of style connect the seal as definitely with the Indus civilisation as if it had actually borne signs of the Indus script; the convention in which the feet and ears and folds in the Elephant's skin are represented, the peculiar rendering of the ears of the rhinoceros, are details which recur identically on seals from Mohenjo-daro. Moreover, a seal impression from that site shows a procession of animals in which the rhinoceros and elephant occur side by side, while a crocodile is figured above. (Plate I, fig. k.)

It is curious, and perhaps significant, that the back of that same Indian seal impression shows a double forequartered animal of a type which recurs in a special class of Mesopotamian seal cylinders found, so far, only at Tell Amar, Assur and Susa, or in other words, in the easternmost part of Mesopotamia, where it borders on the Persian mountains (6). Lastly it is worthy of note that the material of the cylinder from Tell Asmer is rare, if not unique, in Babylonia. Unfortunately expert opinion is not yet available, but to the writer it seems to be made of the glazed steatite used in India for the seals. It should be added that cylinder seals, though unusual, do occur occasionally in India. I am indebted to Mr. Ernest Mackay for this information.

There can be no doubt but that we have in our cylinder seal from Tell Asmar an importation from the Indus valley, which reached Eshnunna about 2500 B. C. nor does it remain isolated, as we have seen. For the more common Indian seal form, a square stamp seal with a pierced knob on the back, bearing a design of concentric squares, was also found in our excavations, and this does not seem to occur elsewhere in Mesopotamia, although known on similar seals at Mohenjodaro. Necklaces of ordinary Akkadian beads sometimes contain beads of etched carnelian which resemble, as Mr. Mackay was the first to point out, Indian specimens. Kidney-shaped inlays of bone, probably used for small statues, are identical in shape with some in shell from Mohenjo-daro and occur nowhere else. And indirect evidence of intercourse with India is provided by the fragment of a clay tablet depicted in Plate I, fig "g" upon which a draughtsman at Eshnunna has sketched the head, horns and hump, of an Indian zebu.

Somewhat uncertain is the evidence of the knobbed pottery. It occurs at Tell Asmar and at Mohenjo-daro, but not at other sites in Mesopotamia. The shapes of the complete vessels (Fig c & h) found during our last campaign of 1932-33 differ, it is true, from those found at Mohenjo-daro. But there is no need to expect identity instead of resemblance. Even our cylinder seal, whose Indian origin does not admit of doubt, has no exact counterpart in Mohenjo-daro or Harappa ; there is also something peculiar about our alabaster stamp seal which shows a row of dots surrounding its concentric squares. The difference may have chronological or geographical reasons; in other words, our seals may belong to a slightly later or earlier stage of the Indus civilization than that found at Mohenjo-daro ; or they may have come from another site

within the same cultural province. For many reasons the last assumption seem likely to prove correct. In any case there can be no longer any doubt that the stage of the Indus civilization which the excavations have disclosed was reached about the middle of the third millennium B. C. ; at which time a lively intercourse with Mesopotamia was kept up, the traces of which we have found in the houses of the Akkadian merchants and craftsmen at Tell Asmar. It should therefore be remembered that the question of priority is entirely irrelevant so long as the Indus civilization is not known to us in earlier stages. For the phase represented at Mohenjodaro is contemporaneous as we have seen, with a period in Babylonia which is separated by three distinct stages of culture, each lasting many centuries, from the remote past revealed by the excavations at Ur and Warka, when man settled in the drying marshes of the Plain of the Two Rivers.

We may well ask, however, whether an analysis of the finds such as they are, cannot lead us to draw by inference conclusions as to the nature of the relationship between India and the West. Is there merely resemblance as a result of a common type of material surroundings, supplemented by such mutual influence as commercial intercourse is apt to bring about ? Or is there a deeper, less external similarity between the civilizations of those regions ?

As to the natural surroundings, we should remember that present day conditions in the Indus valley did not obtain in the third and fourth millenium B. C. For Sind shares with Baluchistan and Mesopotamia a climate which has changed much for the worse during the last four millennia. Sir John Marshall feels inclined to ascribe the increased aridity to a less abundant monsoon ; but whatever the cause of the change may have been its effects are inter alia demonstrated by the extensive remains of early settlements discovered by Sir Aurel Stein in Gedrosia where nowadays the population does not exceed two persons to the square mile (7). It is significant that the bulk of the objects brought back from Baluchistan belong exclusively to that very ancient Iranian Highland culture which antedates the Indus civilization, as it is known to us, by many centuries. And the incipient lack of water is manifest in the dams (gabr band) of which the remains abound. The Indus valley however was able to maintain a large urban population at any rate as late as the middle of the third millenium B. C.

An excellent basis for a comparison of the Indus civilization with the Near East is provided by the architectural remains, because they are numerous and extensive in both regions. It strikes us, first of all, that the buildings most conspicuous all through the Near East, the temples, are seemingly absent in the Indus valley. Unless the structure called a 'public bath' at Mohenjo-daro be of a sacred character, not a single sanctuary has been found. Domestic and civic architecture in general is, on the other hand, much more luxurious and highly developed than that of Babylonia or Egypt (8). Baked brick is not used in Egypt until Roman times, and in Babylonia it is used sparingly for bathrooms, doorsills, drains, lavatories, more rarely for a revetment of temple or palace walls. In Mohenjo-daro on the other hand, baked brick is used throughout and crude brick is confined to foundations or terrace fillings. Mud or bitumen serves as mortar in Babylon, whereas Mohenjo-daro uses mud mortar mixed with gypsum. The rubbish shoots in the private houses, the public dust-bins (p. 16, n8) street drains (p. 17) are so many refinements which Babylonia and Egypt lacked, not only in the third millenium but all through their history. It may be that the scarcity of wood from which Egypt and Mesopotamia suffered, held back the development of secular

architecture; it certainly seems to explain the sparse use of baked bricks in Mesopotamia. But whatever its cause, the superiority of domestic architecture at Mohenjo-daro is most striking.

There are certain architectural details which the Indus civilization and Mesopotamia have in common. The corbelled arch has been proved to exist in pre-Sargonid times at Tell Asmar and it occurs also at Mohenjo-daro. The same applies to circular wells built of segmental bricks, lattice screens for windows made of stone or baked clay horizontal drains built of baked bricks and vertical pottery drains, or drain pipes and ornamental recesses in the walls. But nothing could show better the complete independence of the excellent architecture of Mohenjo-daro than the difference in the application of the last named feature.

The use of vertical recessed niches is a logical consequence of the nature of brick architecture ; in Mesopotamia it is used to enliven the outside of temples or palaces by a rhythmic division of the wall surface, or to accentuate a particularly important part on the outside of the building, such as the towers flanking a temple entrance. At Mohenjo-daro, on the contrary, it is exclusively applied as inside ornamentation of rooms (Pl. VI, 76, 77).

Reviewing the material so far adduced, it would seem that the brick architecture of Mesopotamia and India, represents two independent developments ; but it is by no means unlikely that they are founded on a comomn basis. Building with bricks is in itself an invention which may well have spread from one centre ; in Mesopotamia we can follow its development from very early times. viz.. from the Urak Period. In Egypt on the other hand, brick architecture first appears in a context and in a manner which makes its derivation from Asia very probable (9).

For the rest of the material equipment of the Indus civilization is distinctive in several ways. It shares with the Near East the knowledge of agriculture and of domestic animals. If the plough is not found, this does not mean that it was unknown. We should not suspect its presence in Egypt and Babylonia if it were not for the representations in tombs and on cylinder seals. The use of cotton, well testified at Mohenjo-daro is unknown in Mesopotamia and Egypt; Sennacherib of Assyria (about 700 B.C.) attempted to acclimatize Indian tree-cotton in the botanical gardens at Nineveh, as appears from a cylinder in the British Museum published by the late Professor E. W. King ; there Sennacherib says "the trees that bear fleeces they sheared and they shredded it for garments" (10) ; but cotton at no time played a part in the economics of the Ancient Near East.

Remarkable is the use of bronze, with 4½—13% of tin. Its appearance in the Near East is in any case difficult to date ; it is occasionally found at Tell Asmar and at Ur in pre-Sargonid (Early Dynastic) times, while most of the tools and weapons are still made of copper. And this is also the case in Mohenjo-daro. The highly developed metal industry which made use of the closed mould and which seems to have spread from the Caucasus region to Sumer on the one hand and to Central Europe on the other, affected neither India nor Egypt.

The widespread use of faience is, as Sir John Marshall rightly remarks, a curious feature of the early civilizations all through the Near East, since its production requires

a technique by no means simple, but first of all, a considerable amount of inventive capacity. Here again however we must take into account that we know the Indus civilization at a stage which is atleast 1,000 years younger than the time of the first appearance of faience in Egypt and Mesopotamia, so that we cannot decide as yet whence this knowledge spread.

Glass was not known in India and the present writer atleast is not prepared to admit that its existence in the chalcolithic deposits of Baluchistan is proven (p. 35). On the strength of a first impression one would ascribe the bangles of particoloured glass found by Sir Aurel Stein to medieval times ; and before admitting that they were manufactured by the makers of the chalcolithic pottery one would require much more definite stratigraphical evidence than the brilliant and extensive explorations of Sir Aurel Stein could, in nature of things, produce.

Another technique which is of an exceptional nature and is common both to the Indus civilization and Mesopotamia is, as we have seen already, the etching of carnelian beads, so that the design stands out in white. (11). We have seen that such beads were found at Tell Asmar in Akkadian times ; they occur at Ur and Kish in the preceding Early Dynastic Period. They are found at Harappa, and at Mohenjo-daro but are not so common as in later strata in India. At Tell Asmar we have some specimens of a later date as well (Larsa Period 2100 B. C.) one of which is etched with a spiral design. The land where this techinque originated cannot therefore be established at present.

If, instead of techniques or classes of objects, we consider isolated finds, there are several which remind us of Mesopotamian counterparts. Most striking is the "vanity case" found at Harappa (12); not only is the combination of piercer, ear-scoop and tweezers similar to those from Ur, Kish and Khafaje, but also the method of combining them into one object by fixing a ring through loops obtained by winding the curved ends of the three objects round the stem.

Other objects are enumerated by Sir John Marshall (pp. 104 f) and by Mr. Mackay in a recent article (13). We may add to these some types of beads, e.g., the gold foil disc bead with a tabular hole across to take the thread (Pl. CXLIX, 7) the counterpart of which we found in silver at Tell Asmar. Multiple necklaces (Pl. CXLIX, 3 and Pl. CLI, b, 10) resemble Egyptian ornaments in the use of thin spacers and semi-circular end pieces, while similar end pieces are not found in Babylonia. There, however, we find the spacers and also identical long biconical carnelian beads in Akkadian times, while the long carnelian beads of the Old Kingdom in Egypt are cylindrical, and not like the Indian and Mesopotamian beads, elongated biconical. These and similar points of resemblance between single finds from Mohejo-daro and the Near East are probably significant and not merely accidental. They can, however, be explained adequately as a result of commercial intercourse.

If we consider similarities in spiritual culture, we have first to consider the Indus script which was compared with linear (pre-cuniform) Sumerian writing by Mr. Sydney Smith and Mr. C. J. Gadd, as soon as Sir John Marshall's discoveries were made known. But Mr. Gadd admits (p. 411) "that further experience has not tended to confirm our faith in any direct connection between the writing of Sumer and of the Indus." In fact there are not many different ways in which objects such as, for instance, a fish can be simplified and engraved. Some few signs which are

more complicated resemble each other, but they form an insignificant fraction of the newly discovered script. On the other hand, the excavations carried on at Warka (Eroch) by Dr. Julius Jordan in recent years (14) have revealed earlier stages of Babylonian writing so that its development from pure pictograms through a semi-pictographic stage, thence to a linear and finally to a cuneiform stage can be followed in some detail, and though the material of the earliest stage is still somewhat scanty, there seems no approximation to the Indian signs, which in any case are more than millenium later in date. We need earlier Indian material before we can say whether the two scripts spring from a common root.

In weights and measures there is divergence between the fully developed sexagesimal system of Babylon and that of Mohenjo-daro, which is binary and then decimal. But we know now that in the Jemdet Nasr Period a decimal system has been in use, and though it is patently impossible to enter there upon the intricacies of ancient metrology, again it seems likely that the Mesopotamia and Indus civilizations possess in the matter of weights, an element in common which may derive from a remote past.

In religious matters we can see a little more clearly. There, in any case, the Indus civilization has very pronounced and individual characteristics. In fact, Sir John Marshall writes that the religion of Mohenjo-daro is "hardly distinguishable from still living Hinduism or at least from that aspect of it which is bound up with animism and the cult of Siva and the Mother Goddess (p. vii) It is true that the evidence is purely archaeological; but it seems quite unequivocal. The interpretation of certain stones as linga and yoni symbols seems incontrovertible. There are not only statuettes of the Mother Goddess; but also a seal where a male god with three faces, accompanied by tiger, elephant, buffalo, and rhinoceros, and "seated in a typical attitude of yoga" (p. 52) suggests a protype of Siva. For all these representations and objects the Ancient Near East offers no parallel. It is different when we consider the cult of the Great Mother Goddess and Sir John Marshall in discussing this early form of Saktism, rightly draws attention to the Near Eastern cult of a Great Mother and a young subordinate god, her son and lover, which certainly forms one of the earliest religious strata in the Near East of which we have knowledge. If the religion of the Indus people has on the whole a peculiar and individual character, it is certainly possible to believe that part of it derives from a creed which has been common to India and the Near East in a remote period.

A similar kind of resemblance exists between certain composite animals appearing at Mohenjo-daro and those known from Sumer. The bulk of the animals on the Indian seals, natural as well as mythical are clearly of local stock. Their prototypes do not occur in the West; the style in which they are rendered are peculiar; and even the monstrosities, such as the bulls with elephants' trunks or with three heads (Pl. CXII) are products of a purely Indian imagination. There is therefore no need to adduce Sumerian seals (15) in order to explain designs in which animals are entwined so as to form a svastika or star (Pl. CXII, 283,286). But there are two kinds of monster, which closely resemble Mesopotamian types. The human-headed bearded bull of Sumer and Babylon only differs from the human-headed bearded ram of Mohenjo-daro (Pl. XII, 18,22) in the type of horn depicted. At Mohenjo-daro the strange quadruped has the long corkscrew horns, placed horizontally. of the earliest known breed of Egyptian and Sumerian sheep. Now sheep do not

occur on Indian seals, but this may be due to a religious reason; authorities like Adametz and Hilzheimer (16) state that the original homeland of this early breed is Afghanistan and India, and that it reached Africa with the Hamitic migrations. Its absence from the Mohenjo-daro seals does not, therefore, prove that the Indus people did not know it (17) and necessarily must have derived the picture of the human-headed ram from Sumer where sheep of this type are represented on the monuments. In any case human-headed rams do not occur in Sumer. It is thus impossible to decide whether the Indus people invented their human-headed rum as an approximate equivalent of the Mesopotamian human-headed bull; or whether it is an independent Indian invention. In fact, there is yet another explanation; the two monsters may be variations of an original belief in which a human-headed quadruped played a part, a belief which possibly was common to the ancestors of the Indus people and the Sumerians.

The case is different from other composite being. This is a male human figure with bulls' horns, ears, hooves and tail. It occurs on two seals (Pl. CXI, Nos. 356 and 357). In Mesopotamia it is not only common on seals, but amongst Mr. Woolley's finds at Ur a silver head of this type was found (Museum Journal, Philadelphia, 1929), and in our excavations at Khafaje, a pre-Sargonid site near Tell Asmar, stone pendants in the shape of this demon's head turned up on several occasions. These, though smaller in size, are otherwise almost identical with two clay masks of this personage found at Mohenjo-daro (Pl. XCV, 1,2)—a fact which is all the more striking as the terracotta figurines of the Mother Goddess are as different from the Babylonian type as two classes of such crude objects can be. In the present case it can hardly be doubted that some connexion must exist. But it is proved that the appearance of the monster in India is due to influence from Sumer; and the question arises whether the derivation could be explained as a result of the commercial intercourse which we know to have existed from the Indian importations in Mesopotamia. It is safest not to put a name to this creature; for it is not at all certain that it was called Eabani or Enkidu by the Ancients, as Sir John Marshall was led to believe.

It is in the field of religion, too, that the resemblance with Egypt obtrudes itself. On one seal impression (Pl. CXVI, Number 508) we see figures carrying effigies of animals (on a bull) on standards which exactly resemble the standards carried in front of Pharaoh in certain processions and which appear for the first time in Egypt with the kings of the First Dynasty, when eastern influence for a short period was strongly felt (18). Intercourse between Egypt and the East, which made such influence possible, will also have been responsible for the diffusion of the sacred standard, but in which direction it travelled we cannot tell.

Amongst the statutory of Mohenjo-daro we find another similarity with Egypt. It is the statue reproduced in Pl. C, 4-6, which represents a bearded man kneeling with his right foot and left knee on the ground, while one hand is placed on either knee. We lack the means of deciding whether this attitude is exceptional in the Indus civilization. There would have been no reason to single out this statue from its fellows (which are each unique in their way) were it not that exactly the same attitude is rendered in an Egyptian statue of the First Dynasty from Heirakonpolis; and in the case of this statue we do not know that the attitude is, indeed, exceptional (19). Yet there can be no absolute proof that a direct connexion exists because at this time the Egyptian sculptors were feverishly experimenting, and it is only

at the end of the Early Dynastic Period that a distinctive Egyptian style of sculpture emerges slowly from the chaos. Proof exists, however, that during this period influences from the East affected Egyptian art, and the similarity which we have pointed out may gain significance in the light of future discoveries. It is equally uncertain which country was the donor and which the recipient; the scarcity of stone in the Indus civilization makes it appear likely however that its sculpture was an imitation of work seen abroad; and its clumsiness is well in keeping with this view (19).

Another statuette (Pl. XCVIII) wears a cloak ornamented with a trefoil pattern which appears, similarly incised, on certain Mesopotamian sculptures of the third millenium (p. 356, n. 2). Yet another feature of the statutes deserves to be mentioned here. It seems to me most significant that those from Mohenjo-daro show some of the same fashions in use in India as we meet with in Mesopotamia. It appears that the beard was worn while the upper lip was shaved (20) the hair was sometimes tied up in a chignon at the back of the head and kept in position by a fillet, as we see in the gold helmet of Meskalamdug from Ur, and on Eannatum's style of Victory. Now fashion in ancient or primitive civilizations is not to be taken lightly. It is recognised as venerable link with the past; it proclaims the ethnic or national affinity of the individual. Fashion does not spread, under such circumstances, as a mere result of commercial contact. Consequently the similarities in coiffure, beard and moustache between the statues from Mohenjo-daro and those from pre-Sargonid Mesopotamia betray some sort of intimate ethnic relationship between the leading classes in those two regions. The wide divergence in culture on the other hand, excludes a very close connexion, at the only time in which the Indus civilization is known to us. But in Mesopotamia we possess an unbroken series of monuments which enables us to trace the prevalence of this fashion back through a number of centuries, to the Uruk period at least.

The conclusion seems inevitable that an important element in the population of the two regions belonged originally to a common stock. We have noticed in discussing architecture and metrology, religious monuments and seal designs, that the suggestion of a common substratum of certain cultural traits in India and Mesopotamia, has, as it were, been forced upon us by the various similarities which could not adequately be explained as being due to commercial intercourse, or to other factors active in the one period in which we have only knowledge of the Indus civilization.

It is relevant to recall here that the earliest settlers in the plain of the Two Rivers seem to have descended from the Iranian Highlands, which had supported a homogenous culture, the remains of which have been traced by Sir Aurel Stein up to the eastern frontier of Baluchistan; and that the deserts interposed between India and Iraq at the present time were to a large extent inhabited at that early period, when the climate was less arid. If progressive desication of the marshes in Mesopotamia attracted settlers from the East, it may well be that simultaneous effects of the climatic changes in the Highlands compelled them to migrate. And then it would be more than likely that they descended not only to the river valleys in the West but also to the Indus plains in the East.

We move here, obviously, in the realms of sheer hypothesis. In Mesopotamia we have been able to show that a certain measure of continuity connects the civiliza-

tion of these earliest settlers with that of the Sumerians who were ultimately subjugated by Sargon of Akkad. The present writer is inclined to the belief that those earliest settlers were in fact, Sumerians. But though many of his colleagues agree, several do not accept his view; and in any case we have not a shred of evidence in India to connect the civilization of Mohenjo-daro with the chalcolithic culture of the Iranian Highlands.

We have here, however, explored the field of possibilities over the whole of its length and breadth in order to demonstrate the unique importance of the problems raised by the discoveries at Mohenjo-daro and Harappa. At present the magnificent achievement of Sir John Marshall and the scholars and assistants who rallied round him remains a torso. It is tragic misfortune that the Government of India has interrupted explorations at this point. Since it has been established beyond a possibility of doubt that India played a part in that early complex culture which shaped the civilized world before the advent of the Greeks, it should be considered a national duty of new India to continue the work which has been so brilliantly begun.

H. FRANKFORT.

11 Journal of the Royal Asiatic Society of Great Britain and Ireland, for 1932, London. Published the Society, Price Rs. 15.

Contents: Another Indus Valley Seal, by S. Langdon, pp. 47ff.

2 Fabri, Dr. C. L. Note on the Importance of South Persia in Archaeological Research.

Indian Art and Letters. Vol. VI, pp. 120f. with a sketch map.

The connexion of prehistoric Indian and Mesopotamian civilizations becomes more and more evident. The areas lying between the two extremes have lately been explored by Prof. Herzfeld (Luristan) and Sir Aurel Stein (Baluchistan both Indian and Persian). The author who accompanied Sir Aurel Stein on his last tour alludes to the important discoveries made in Persia, Baluchistan and points out, that the coast of the Persian Gulf is a very promising and important archaeological field.

"We have ample evidence, historic and other, that navigation along the Persian coast from the West to India (and even to China) was known in antiquity. There exists the clearest possible evidence that, prior to the 'discovery' of the 'new route' to India by the Greek navigators, extensive commerce was carried on these seas, and merchandise reached Mesopotamia from the Indian side."

68 The Indian Antiquary. A journal of Oriental Research. Vol. LXI, (1932).

Contents: Old sites on the Lower Indus, by G. E. L. Carter, pp. 86-90. The river courses of the Punjab and Sind, by R. B. Whitehead, pp. 163-169.

69 The Indian Historical Quarterly. Vol. VIII, Edited by Narendra Nath Law. Calcutta. Oriental Press, 1932.

Contents: Mohenjo-daro and the Indus Valley Civilization, by Narendra Nath Law, pp. 121-164.

Supplements: The Scripts of the Indus Valley Seals, II, by Pran Nath pp. 1-32.

109 Chanda, Ram Prasad. Sind Five thousand years ago.

The Modern Review, Vol. LII. No. 2. pp. 151—160, with 2 plates and 12 illustrations.

A review of Marshall, Mohenjo-daro and Indus Civilization.

113 Cousens, Henry. The Antiquisities of Sind, with Historical Outline. Calcutta, 1929; see Annual Bibliography of Indian Archaeology, 1929. No. 108; 1930. No. 85; and 1931, No. 97.

Reviewed: Quarterly Journal of Mythic Society, Vol. XXII, n.s. No. 3; pp. 378-379 by N. I. "This brilliant volume ably compiled by Mr. Henry Cousens, M.R.A.S. is a veritable storehouse of information regarding not only the antiquities of Sind but also of its past history."

Calcutta Review, May 1932, by Kalidas Nag.

119 Gadd, C. J. Seals of Ancient Indian Style found at Ur,

(Reprint from) The Proceedings of the British Academy. Vol. XVIII, London, 1932. 22 pages, with 3 plates, Price of reprint 2s. 6d.

The title of this paper is not exhaustive, as Dr. Gadd includes not merely seals of the Indus valley style found at Ur, but all similar specimens from other sites in Mesopotamia (Tell Asmar, Lagash, Kish, etc.) Eighteen of these are described and discussed as well as illustrated in detail. In summing up Dr. Gadd reminds us that atleast eight of the seals in question are datcable with a fair amount of certainty, and the date so received supports Sir John Marshall's conclusion, that they originate from a period which can roughly be put in the earlier half of the third millenium B.C. The author also points out that a number of the Indus Valley seals found in Mesopotamia bear symbols in an astronomical character well known to early Mesopotamian civilization.

140 Langdon, S. Another Indus Valley Seal.

Journal Royal Asiatic Society 1932. pp. 47f. with a text illustration.

Professor A. B. Cook of Cambridge purchased this seal from a London dealer who had it among a lot of Assyrian cone seals, etc. the probable origin therefore is Mesopotamia. It is a round seal but of the Indus Valley type, bearing an engraved bull before a 'trough'; the inscription consists of six signs all in "Indus Script."

143 Mackay, Mrs. Dorothy. Mohenjo-daro and the Ancient Civilization of the Indus Valley. *In Bengali.*

Prabasi. Vol. XXXII, Pt. I, pp. 831-838, and Pt. II, pp. 105-113, with 6 and 14 illustrations.

A Bengali translation of an English article published in the American Journal "Asia" on discoveries at Mohenjo-daro.

145 Mahon, Colonel, A. E., D.S.O. Recent archaeological discoveries in India.

Journal of the Urusvati Himalayan Research Institute, Roerich Museum, New York, Vol. II, pp. 5-9.

Brief summary of excavations at Mohenjo-daro, Harappa, and other archaeological explorations carried out during the year.

144 MacMunn, Sir George. The New Light on Early India.

The Baptist Times, London, 11 February, 1932. On the excavations at Mohenjo-daro.

147 Marshall, Sir John, C.I.E., Litt. D., F.S.A., etc.

Mohenjo-daro and the Indus Civilization. 3 vols. London. 1931. See An. Bibl. of Indian Archaeology, 1931. No 120a

Reviewed. Journal Royal Asiatic So. 1932. pp. 453-466 by F. W. Thomas and under the title Mohenjo-daro—Indus Epigraphy pp. 466-503, by G. R. Hunter. Prof. Thomas not only reviews the book, giving a general impression of its contents, but adds a number of suggestions, interpretations, etc. He

compares the Indus script with the earliest Chinese writing in which he recognizes a number of similar symbols, he also enumerates a few Sanskrit words that are possibly derived from Sumerian. The reviewer's opinion is that the editors of the work have investigated the matter "very judiciously." Dr. Hunter points out a number of mistakes and omissions in the portions of the books dealing with the Indus script. His exhaustive discussion reveals a number of new facts regarding the character and possible explanation of the script; the signary, however, published by the editors may be regarded as almost complete. The reviewer has examined 1400 newly found inscriptions and very few new signs have been found. He gives a new sign manual in which 149 "basic" signs are listed with their only graphic variants, *guṇa* modifications and *saṃyukt* signs. Besides these, he gives a list of 242 "words," *i.e.*, a list of such combinations of signs which he considers on account of their sequences, to represent names, concepts and words. He also deals exhaustively with the so-called "accents," to which he assigns the values of vowels. The reasons of his identifications are given.

Indian Arts and Letters. Vol. VI pp. 151-153, by R. Frank Zentler, and Pierre Dupont (of the Mussee Guimet, Paris); The reviewers are inclined to conclude that the Mohenjo-daro civilization was originated by people of the Dravidian race.

"Two points appear to us to substantiate these conclusions; firstly the presence of several marked pots similar to those of southern India, and secondly the existence in southern India of beads and necklaces related in form and substance to those of the oldest sites at Ur and Kish....."

Zeitschrift der Deutschen Morgenlandischen Gesellschaft. n. s. Vol. 11, No. 1/2 1932, pp. 135-139 by W. Printz.

Journal Indian History Vol. XI, pp. 366-379, with 2 plates;

"The report, therefore is quite worthy of the great labour that it has involved, almost ten years' labour in the study, and five years' work at actual excavation."

The Modern Review, Vol. LI. No. 4 pp. 367-371.

Indian Historical Quarterly. Vol. VIII. pp. 121-164, by Narendra Nath Law.

"Therefore, the position that appears reasonable is that until further definite clues are forthcoming, the attribution of the authorship of the Indus Valley civilization to the non-Aryans is not justified."

The Times Literary Supplement, 17 March 1932, by H. Hargreaves.

Frankfurter Zeitung, 22 May 1932 by J. Nobel.

Journal of the Behar and Orissa Research So. Vol. XVIII. pp. 235-239 by Banerji Sastri.

"The co-ordination of the labours of numerous scholars has produced a sound and successful book, thoroughly worth reading and admirably readable. The present notes are confined to a consideration of the script."

Orientalistiche Literaturzeitung Vol. XXXV, No. 10 pp. 641-653 by O. Strauss.

153 Rawlinson, H. G. Indus Valley Civilization. Its rediscovery and Meaning.

Times of India, Bombay, 5, August 1932.

162 Shirai, Chosuke. Mohenjo-daro, Harappa, Indus.

(Remains of Mohenjo-daro and Harappa and the Indus Civilization of Ancient India. In *Japanese*).

Shikan, No. 2. 1932.

172 Venkatachalam, G. In pre-historic Mohenjo-daro.

Roopa-Lekha, Vol. III, No. 12, pp. 32-37. Account of a visit.

254 (Annonymous). Indus Valley Script. The Statesman, Calcutta, 14 Septr. 1932.

"In the June number of Ancient Egypt Sir Flinders Petrie the well known Egyptologist has published an article which goes far towards suggesting a possible solution for the deciphering of the ancient Indus Valley script brought to light in recent excavations carried out at Mohenjo-daro and Harappa by the Archaeological Department, a description of which is given in the very excellent work of Sir John Marshall. If this solution is not the actual one, it is certainly the most probable advanced so far."

255 (Annonymous). A 4000-Year old stone Inscription (In Hindi) Nagari, Vol. XIII pt. 2, p. 24.

A report quoted from the "Leader" by B. N. Pandya, of a stone measuring 32 by 7 feet found near the village of Vikramkhol district Sambalpur, containing an inscription in characters which, according to Mr. K. Jayaswal, show an intermediate stage between the Mohenjo-daro and Brahmi scripts, and are thus supposed to be as old as 2000 B. C.

256 Nath, Pran, D.S.C., PH. D. The Scripts on the Indus Valley Seals II. Indian Historical Quarterly, Vol. VIII, Supplement, pp. 1-32.
See Annual Bibliography of Indian Archaeology, 1931, No. 232.

From the preface. "The occurrence of names of Sumerian deities was a puzzle. —I decided to make a thorough search in the Pauranic and Tantric literature for some clue. The discovery of the text of the goddess Camunda sheds a new light on the subject."

Contents: Geographic distribution of the Indus script.—Nature of the Indus language and the script.—A brief examination of the views advanced by Sumerian scholars.—Religion of the Indus people.

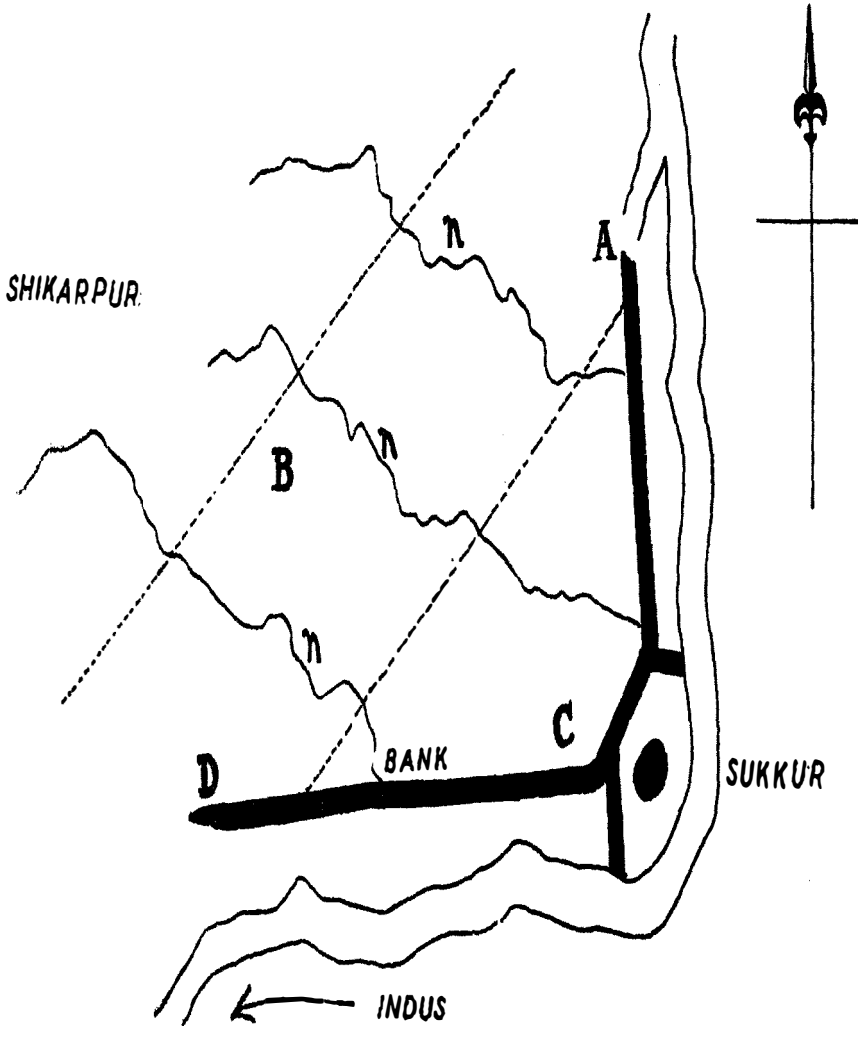
256a Nath, Dr. Pran. The Deciphering of the Indus Valley Script. Actes XVIII Congress, p. 145.

Cp. Annual Bibliography of Indian Archaeology. 1931, Nos. 232, 232a.

460 Thyagaraju, U. S. Sumero-Dravidian Affinities.

Quarterly Journal of the Mythic Society. Vol. XXIII, n. s. No. 2, pp. 222-228.

SUKKUR BUND



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(RE-PRODUCED FROM SIR.CH. NAPIER'S LIFE, VOL. III. P. 315)

"While studying Professor Waddell's Sumer-Aryan Dictionary, it struck me that many of the Sumerian roots that he had listed had cognates or derivatives in the Dravidian languages. I give below a list of what seem to me to be Sumerian-Dravidic Affinities. I cannot make bold to draw conclusions from these affinities, for there is every possibility of such resemblances being merely accidental."

476 Carter, G. E. L. Old sites on the Lower Indus.

Indian Antiquary, Vol. LXI, pp. 86-90, with two plates.

Thambanwaro Masjid and some other sites.

"In short, the cult of the River (Darya Pir) and the simplicity of the architecture of the 'Masjid' indicate that we have a genuine fusion of Hinduism and Islam, which we can locate in that obscure period when the Arab dominion was passing away, after 871 A.D."

496 Stein, Sir Aurel K.C.I.E., F.B.A. The site of Alexander's Passage of the Hydaspes and the Battle with Poros.

The Geographical Journal, Vol. LXXX, No. 1, July 1932. pp. 31-46.

For an extract *Cf.* Annual Bibliography of Indian Arch 1931. pp. 1-5.

497 Stein, Sir Aurel.—A Historic Victory.

The Times, London, 15 April 1932, with one illustration and a map.

Alexander's Battle with Poros; the passage of the Jhelum.

498 Stein, Sir Aurel. Alexander's Passage of the Jhelum.

Indian Antiquary. Vol. LXI. pp. 183-185, with one sketch map.

Reprinted from the Times of 15th April 1932.

Cf. Annual Bibliography of Indian Archaeology, 1931. pp. 1-5.

504 Whitehead, R. B. The River courses of the Punjab and Sind. Indian Antiquary, Vol. LXI, pp. 163-169.

"It is certain that the course of each of the rivers in the plains of the Punjab and Sind has changed within historical times, but this does not mean that the main beds have moved to the extent that has been suggested. Harappa is on the old high bank of the Ravi and aerial reconnaissance along the bank has revealed a chain of sites possibly coeval with it. It would appear that the old high bank of the Ravi has remained much as it is to-day since pre-Vedic times. The discovery puts the matter in its proper perspective. The bed of a large river in an alluvial plain may be twenty and even thirty miles wide. The river is free to oscillate within these limits, but may not have transgressed them for thousands of years. I think this is true of the Ravi, the Chenab, and the Jhelum. The Beas and Sutlej seem to have been more mobile."

679 Frankfort, Henri. Archaeology and the Sumerian Problem.
(The Oriental Institute of the University of Chicago; Studies in Ancient Oriental Civilization, No. 4) Chicago Illustrated. The University of

Chicago Press, 1932, Royal 8vo. XI, and 72 pages, with 4 comparative tables, 10 figures and a map. Price one dollar.

Dr. Frankfort discusses at length "Relations with the East and with the North" (pp. 23-40), a chapter dealing mainly with the finds at Mohenjo-daro and Sir Aurel Stein's Baluchistan Memoirs. One of the author's most important conclusions is: "The earliest settlers in Mesopotamia, then, were people descended from the Iranian Highlands and possessed of a culture which extended eastwards to the very borders of the Indus Valley." (p. 30)

680 Frankfort, Henri, Jacobsen, Thorkild and Preusser, Conrad:—

Tell Asmar and Khafaje; the first season's work in Eshnunna, 1930-31.

(The Oriental Institute of the University of Chicago; Oriental Institute Communications No. 13). Chicago, Ill. The University of Chicago Press, 1932, 8vo. ix and 112 pages, with 54 illustrations, including folding maps, and a frontispiece. Price $ 1-50.

This work is specially included in this bibliography, because it deals with the Mesopotamia site at which Dr. Frankfort has found later seals and beads of the Indus Valley type. Tell Asmar, identified with the ancient capital Eshnunna, is a site about fifty miles north-east of Baghdad. The excavation yielded finds of 2300 to 1900 B.C. The other site, Khafaje, lies 20 miles to the south-west of Tell Asmar.

681 G. (add.) C. J. A seal of Mohejo-daro type.

British Museum Quarterly, Vol. VII, part 1, pp. 5-6, with one plate Bought at Baghdad and presumably found somewhere in Iraq.

721 Stein, Sir Aurel. An Archaeological Tour in Gedrosia.(Memoris of the Arch, Survey of India, No. 43) Calcutta. 1931.

Reviewed. Quarterly Journal Mythic So. Vol. XXII, .n.s. No. 4, p. 526 by R. Indian Antiquary. Vol. LXI, pp. 96-97 by C. E. A. W. Oldham "Sir Aurel in planning this tour had kept in view the possibility of finding in the intervening country further links between the remains of the "Indus Culture," found at Harappa and Mohenjo-daro and the cultures revealed from pre-historic sites in Sistan, Iran and the Tigris-Euphrates basin. That such links have indeed been traced by him will be obvious to all who study the records of these last two tours; but their exact historical cultural and chronological inter-relations still remain in a large measure to be worked out."

NOTES.

1 Mohenjo-daro and the Indus Civilization. Being an official account of archaeological excavations at Mohenjo-daro carried out by the Government of India between the years 1922 and 1927. Edited by Sir John Marshall etc., 3 vols London; Arthur Probsthain, 1931, Cf. Annual Bibliography of Indian Archaeology, 1931 No. 120a.

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2 See the Author's Studies in Ancient Oriental Civilization Archaeology and Sumerian Problem No. 4, Chicago, 1932, especially pp. 23ff. and Appendix IV.

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3 The chronology of the first half of the third Milleninum in Mesopotamia is a vexed problem, and the use of dates (2900 B. C. 3500 B. C. etc.) suggests a degree of precision in our knowledge which, in actual fact, does not exist. We may place Sargon of Akkad about 2500 B. C. or perhaps 2600 B. C. We know a homogenous Sumerian civilization which existed before his coming, and which is variously called Early Dynastic, pre-Sargonid, Early Sumerian, Lagash or plano-convex brick period. Here belong the well-known Royal Tombs from Ur, and also the remains discovered by the French at Lagash (telloch). The Early Dynastic is preceded by three distinct periods of civilization; the Jemdet Nasr, Uruk, and Al 'Ubaid periods. The last one represents the civilization of the earliest inhabitants of Mesopotamia, who are shown by their painted pottery to have come from the Iranian Highlands.

4 Journal Royal Asiatic So. 1925 p. 697 ff.

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5 For a further account see; Tell Asmar, Khafaje, and Khorsabad, Second Preliminary Report of the Iraq Expedition, Oriental Institute Communications No. 16, Chicago -1933, pp. 47-53.

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6 Tell Asmar, Khafaje, and Khorsabad, p. 52.

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7 Memoir Arch. Survey of India, No. 43, pp. 34, 106, 131-2 and elsewhere.

8 In Babylonia part of a town of the Larsa Period (about 2100 B.C.) was excavated at Ur by Mr. Woolley (Antiquaries Journal VII, No. 4) and samples of domestic architecture were obtained at Babylon (Reuther, Der Merkes, w.v. D.O.G.). At Tell Asma an Akkadian and Early Dynastic town is being excavated by the writer (O. I. C. No. 16) a town which is contemporaneous with Mohenjodaro. In Egypt, part of a workmen's settlement of about 2000 B. C. was excavated by Petrie, Illahun, Kahun, and Gurob, London, 1891. For the rest, we are dependent on the information from Tell el Amarna, though it may be that the very logical plan prevalent there may not have been generally used elsewhere in Egypt. See the annual reports of the excavations in the Journal of Egyptian Archaeology, London, 1922-33, and Peet and Wooley, City of Akhenaton I, London, 1923, Frankfort and Pendlebury, City

of Akhenaton II, London, 1933, N. de. Garis Davies, The Town House in Ancient Egypt, Metropolitan Museum Studies I, part 2, New York, 1929.

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9 The earliest bricks in Egypt are found lining graves of the Second Predynastic Civilization, the northern character and Asiatic affinities of which have been well established by Scharff, Grundzuge der Aegyptischen Vorgeschichte, Leipzig, 1923. The earliest building in bricks is the large tomb called "Tomb of Menes" near Naqadah, which belongs to a period when ephemeral Babylonian influences are traceable in many ways, and which moreover is decorated on the outside with recessed niches. For Sumerian influence in Egypt in the protodynastic period (a subject which needs to be studied afresh in the light of new evidence) see the writers Studies in Early pottery of the Near East, I, pp. 103-143, London, 1924.

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10 Proceedings of the Society of Biblical Archaeology 1909, pp. 339 ff.

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11 A Specialist's study on this subject will be published by Mr. Horace C. Beck in one of the next numbers of *Archaeologia*. Mr. Mackay has described the manufacture of etched beads by a modern Indian craftsman in *Man* 1933, p. 150.

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12 Archaeological Survey of India, Annual Report 1923-24, p. XIX, fig. 22.

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13 Further links between Ancient Sind, Sumer and elsewhere, *Antiquity*, December 1931. Unfortunately Mr. Mackay dates his Mesopotamian parallels in years, but such terms as 32 B.C. 3000 B. C. and soon convey no meaning, unless one knows beforehand which particular group of remains an Assyological author is thus arbitrarily dating.

14 Abhandlungen der Preuss. Akademie der Wissenchaften Phil. Hist. Klasse, 1931, Nr. 4; 1932, Nr. 2.

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15 Cf. Webber, Altorientalische Siegelbilder, Fig. 233; Antiquaries Journal, Vol. X, pl. XLIX.

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16 Leopold Adametz, Wanderungen der Hamitten erschlossen aus ihren Haustier-rassen, Wien, Max Hilzheimer, Naturiche Rassenges-chichte der Haussau-getierre, pp. 188 ff.

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17 A few skeletal remains of sheep (p. 659) do not seem to be conclusive evidence on this point.

18 Cf. King Narmer's Palette and Ceremonial Mace, Caprat, Debuts de l'Art d' Egypte, figs. 167-173, or Quibell, Hierakonpolis, Vol. I Pl. II, Caparat, Debuts de l'Art, p. 249 fig. 178

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19 I leave out of account here the accomplished statues of Pls. X and XI which stand absolutely apart, though Sir Marshall maintains that they must belong to the Indus civilization.

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20 Again Mr. Mackay's doubt whether this is so in the case of the statue of Pl. XCVIII, see my Archaeology and the Sumerian Problem, p. 29, note 1.

INDIA—1933.

Archaeological Researches in India during the year 1932-1933.

No excavations were carried out at Mohenjo-daro owing to the retirement of Dr. E. J. H. Mackay, whilst at Harappa little work was done. We understand that Dr. Mackay, is bringing out a book on "Further excavations at Mohenjo-daro." As regards the mysterious Indus Valley script, we may draw attention to a paper on "Seals of ancient-Indian style found at Ur", published by Mr. C. J. Gadd in the Proceedings of the British Academy, Vol. XVIII. Mr. G. D. Hevesy's startling discovery that the script of the indus Valley shows certain analogies to that found on wooden tablets in the Easter Island has evoked considerable interest.

1 Note :—The present article has been mainly drawn from a note communicated to the principal Indian newspapers (The Statesman, of 5th November, 1934, The Hindu, of 8th November 1934, etc.) by Rai Bahadur Daya Ram Sahni, Director General of Archaelology.

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3 Ayyar R. S. Vaidyanath :—The Indo-Sumero-Somitic Problems. I. (Madras University Extension Lectures, 1932). Price 8 annas.

Reviewed : Journal of the Andhra Historical Research Society. VII, pt. 3. p. 190 by R. S (ubba) Rao); "we agree whole-heartedly with all the views of the author."

Quarterly Journal of theMythic So. XXIV, No. 1,p. 79f. by S. Sriantaya Ayyar has taken up the question of the identities, affinities and the analogies between the Sumerians and the Dravidians on the one hand and the Hittites and the Indo-Aryans on the other."

7 Casson, St. Excavator's progress ; the East-from Iraq to India. The Listener, X, No. 236, London, July 19, 1933, p. 90-93. 9 illustrations

A brief survey of the recent excavations in Ur, Persipolis and Mohenjo-daro.

15 Friederichs, Heinz F. Zur Kenntnis derfruhges chichtlichen Tierwelt Sudwestasiens.

Unter besonderer Berucksichtigung dor neuen Funde von Mohenjo-daro, Ur, Tell Hlcaf und Maikop. (Der Alte Orient, Vol. 32, No. 3-4) Leipsic ; J.C. Hincrichs' sche Buchhandlung, 1933, Royal 8vo. 45p. 26 illustration in the text, 9 pl. Price R. M. 2.70.

Contents : 1, Degree of culture and the domestication of animals. II. The importance of the representations of animals for zoology and culture-history ; 1, Mohenjo-Daro on the Indus ; 2, Ur, in Southern Mesopotamia ; 3, Tell Halaf in Northern Mesopotamia ; 4, Maikop in Northern Caucasia—IV. Conclusion ;

"Als alteste Haustiore Sudwestasiens sind auf Grund der hier besprochenen Darstellungen auzusehen ; Ur, Zebu, Schalf und ziege; ihnen folgen Dromedar ferrner Pferd und Esel, we ihre Bastarde, Maulesel und Maultior, Beweisen," A contribution to our knowledge of the prehistroic animal—world of south-

west Asia; with special relations to the new discoveries at Mohenjo-daro, Ur, Tell Half and Maikop.

Conclusion. The oldest domestic animals of south-west Asia based on what we already have explained, are, aurochs, zebu, sheep, and goat, then follows the dromedary, further the horse and donkey, as proved by the existence of their descendants the mule and hinny.

19 Grousset, R. The Civilizations of the East. Vol. I, The Near and Middle East, Vol. II, India, Translated from the French by Catherine Alison Phillips.

Reviewed; American Journal of Archaeology. XXXVII, No. 3, p. 527 by A. Coomaraswamy; "A readable and well documented handbook of value equally to the general student and to those who wish to pursue the subject farther. The Hellenistic problem is treated in orthodox fashion."

63 The Ganga. Special Archaeological Number.

Reviewed: Journal Andhra His. Research So. VII pt. 3, 192-3 by M. (ama) (Rao); "This is a welcome addition to the Hindi literature. The book opens with half a dozen papers on the history of Indological Research by eminent scholars like Dr. S. K. Iyengar, Professors P. Sreenivasacharis and B. Motichand. The two papers on the Indus Valley civilization by Dr. N. N. Law and Laksman Sarup are very intersting. This book contains many learned disquisitions on Ancient Indian Art and Architecture, Paleography, Chronology, Iconography, Epigraphy, Buddhism, etc., besides articles on matters of general interest. The work is profusely illustrated.

Hindu, Madras, March 21, 1933.

77 Law, Narendra Nath. Sindhu-upatyaka-ki-sabhyata aur Mohenjo-daro. (The Civilization of the Indus Valley and Mohenjo-daro. *In Hindi*).

Ganga, January 1933. p. 48-62.

79 Locquin, Jeame J. La civilisation pré-aryenne de la vallée de l'Indus.

Gazette des Beaux-Arts. Paris. VI, periode, IX, p. 321-42, 33 illustrations.

A brief and clear resume of the results of the excavations as well as of historical research.

81 Mackay, Dorothy;—Mohenjo-daro Prachin Sindhutirer Subhyata. (Mohenjo-daro and the ancient civilization of the Indus Valley, *in Bengali*).

Prabasi, Asvin and Kartik 1339 V. S.

A short review of the work done at Mohenjo-daro.

81a Mohenjo-daro and the Ancient Civilisation of the Indus Valley.

Smithsonian Institution, Annual Report for 1932, p. 329-444. illustration.

Resume of the discoveries made by Sir John Marshall.

82 Mackay, E. J. H. Excavations at Mohenjo-daro.

Annual Report, Archaeological Survey, 1928-29, p. 67-75, pls. xxiii-xxix.

Mr. Mackay has cleared a portion of what he considers to be the "Artisans' Quarter" of the late period, but the principal operation was the excavation of a large area to a depth of some 23 feet below the original surface of the mound and to the fourth level of occupation. A steady deterioration of the masonry and the decreasing size of the houses appear to be an index to the decay of this civilization from the Early to the Late Period. Mr. Mackay is of opinion that recently discovered cylinder seal shows that the upper strata of Mohenjo-daro can be safely dated to 3000-2750 B. C. as its form is very like pre-Sargonic seals found at Mesopotamia. Other seals showing a goddess in a *pipal* tree and another horned figure in *yoga* attitude (—Siva) tend to give a stronger Indian than Western orientation to this Indus Valley Culture. It is not improbable that these sites will yield definitive prototypes of Indian deities and art motifs.

83 Mackay, E. J. H.—Mohenjo-daro Marvels, II; Some recent discoveries, Times of India, Bombay, 29 December 1933.

Sir George Birdwood Lecture to the Indian Section of the Royal Society of Arts, London.

84 Mahon E. A., Recent Archaeological Discoveries in India. Journal of the Urusvati Himalayan Research Institute (Roerich Museum, New York) III. 37-40.

A review of the Annual Arch. Survey Report, 1927-28.

85 Marshall, J. Mohenjo-daro and the Indus Civilization, London, 1931. See Annual Bibliography of Indian Archaeology, 1932. No. 147.

Reviewed : Antique Review, Rajshahi III p. 111-119 by Binode Bihari Roy Vedaratna. Frankfurter Zeitung, January 1933 by W. Kirfel. Journal Indian History, Madras, XII, p. 114-127, 268-284, 423-442, 6 plates by S. K. Aiyangar.

112 Svarup, Lakshman. Mohenjo-daro (*in Hindi*). Ganga. January 1933, p. 62-69, 9 illustations Nos. 90-97.

228 Hevesy, G. de. Oceanic et Inde pre-aryenne ; Mohenjo-daro et l'ile de Paques. Bulletin de l'association Franciase des Amis de l'Orient, Paris, No. 14/15, p. 29-50 1 plate; "l'ecriture de la vallee de l' Indus, et celle de ses antipodes, l'ecriture de l'Ile de Paques, appartiennent a la meme souche.

229 Hevesy, G. de. Sur une Ecriture Oceanienne paraissant d'origine neolithique.

Bulletin de la Societe Prehistorique Francaise, LeMans, No. 7/8 p. 3-15, 3 plates.

The author compares the script of the Easter Island with that of Mohenjo-daro. He thinks that both represent the same type and may have originated in neolithic China.

233 Sur. A. K. Origin of the Indus Valley Script.

Indian Historical Quarterly, IX, p. 582.

Discovery of a connecting link between the Indus Valley script and the Brahmi spirit in a cave inscription at Vikramkhol in Sambalpur.

325 Breloer, B. Alexanders Kampf gegen Poros. Ein Beitrag zur indischen Geschichte. (Bonner Orientalistische Studien, 3) Stuttgart.

Introduction. Section A. detailed study of the accounts of the ancient historians Section B, Results of the author's local investigations. Eight points lead him to the conclusion that not Jalalpur but Jehlum was the site of Alexander's battle with Poros. In a postscript the view of Sir Aurel Stein is critisized.

Reviewed; Journal of Indian History, XII, p. 318f by V.R.D. Acta Orientalia. XII, I. p. 80 by S. Konow; "His arguments are solid and so far as I can judge, conclusive."

336 Friederichs, H. F. and H. W. Muller.

Die Rassenelemente in Indus. Tal Wahrend des 4. und 3 vorchristlichen Jahrtausend unde ihre Verbreitung.

Anthropos (International review of Ethnology and Linguistics, St. Gabriel-Modling near Vienna.) XXVIII, 383-406, illustrations.

The population of the Indus region in the 4th-3rd century B. C. consisted of four different ethnic elements; weddoid, hamitic, monglooid, and armenoid. It does not differ principally from the ancient population of Mesopotamia.

431 Fabri, C. L. Alexander's Battle with Porus; Sir Aurel Stein's new location. Annual Bib. of Indian Archaeology. 1931, p. 1-5.

640 Herzfeld, E.—Aufsatze zur altorientalischen Archaeologie II. Steimpelsiegel; A. Problematik, B. Die eleamis ch-kaspische unde die hettische Familie, C. Die sumerische Familie.

Archaeologische Mi teilungen ays Iran. (Berlin) V; pt. 2-3, pp. 49-124.

The author discusses the problems connected with the non-cylindrical button-shaped, hemispherical and theriomorphic seals that are found in Asia Minor, Armenia, Mesopotamia, Syria, Persia and Baluchistan. Their origin goes back to prehistoric times when real "buttons" were used for making personal property. The author then inquiries how far certain types of seal impressions (not the form) are characteristic of certain periods and can be helpful for a comparison of archaeological problems notably in Elam and Sumer. In describing the two chief classes (B and C) the criterium is formed by the figures on the seals and the technique, by the shape of the seals. Many of these figures are reproduced in the text.

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ANNUAL BIBLIOGRAPHY OF INDIAN ARCHAEOLOGY

This publication is issued by the Kern Institute-Leyden, Holland, with the aid of the Governments of Netherlands India, Imperial Government of India, and Ceylon, and the Ruling Princes of India.

It is a quato Volume of 166 pages and contains eight plates.

The foreword is by Prof. Vogel ; in which he writes "for the introduction of the present volume we have received important contributions from various quarters. We are indebted to Dr. C. L. Fabri for a general article on the progress of archaeological research in India illustrated by means of some excellent photographs which the Director General of Archaeology has placed at our disposal ; The text-illustrations belonging to this article were prepared by Dr. Fabri.

In the Indtroduction under the heading "prehistorics," Dr. Fabri writes about Mohenjo-daro, thus :

"During December 1933 and January—February 1934 Mr. K. N. Puri, the custodian of the Mohenjo-daro Museum, and Mr. Q. M. Monteer, who superintended the conservation work carried out on that site, spent a few weeks in excavating at Mohenjo-daro a small mound of the Dk. area to which the site-mark Dk. I, has been given. A nine foot wide street runs across the middle of this mound, and the large number of rooms on both sides have been excavated down to a level of some 11 feet. The remains found here are similar to those excavated by Dr. E. Mackay in other portions of the Dk. area, and belong mainly to what has been termed the "Late period of Mohenjo-daro." The rooms are built of burnt bricks, and a covered brick-built drain runs along the whole length of the street, which is some 250 feet (76 meters). The upper strata, Late III and Late II. yielded few antiquities ; but rooms of the Late I period contained some two hundred objects of interest. Among these were seals of the now welknown Indus Valley type, fragments of shell-pin, a three-pronged fork of copper, minor objects made in terra-cotta and faience, a copper casket (height 7" or 18 cm) and two small beads made of gold-leaf. One of the seals reproduced here as a text-illustration (Fig. 1) deserves special mention. We possess a number of seals at Mohenjo-daro with representations of a tricephalic (three-headed), composite animal, and one or two sealings with a bi-cephalic(two-headed), creature but this is the first seal showing a bi-cephalic monster clearly drawn, with a taurine body and the heads of a short-horned bull and of a so-called "unicorn." Now I believe that this seal is important in so far as it may settle the much discussed matter of this unidentified animal. It has been argued that the "unicorn" may in reality represent an animal with two horns, only one horn being shown on account of the fact that the horns are seen in profile, so that the one would cover the other. The fact, however, has been overlooked that all other two-horned animals, *e. g.*, the ibex, are constantly represented with both horns, and that even the tusks of the elephant are shown separately, though there would have been good reason to omit the second one

which is, in fact, often invisible. Now that we have a representation of an ordinary bull with the head of the unicorn added to it, I believe the problem has been solved, in as much as we must relegate the unicorn to the large category of composite and imaginary animals invented by the ancients. It certainly was not meant for a bull, nor was it a buffalo or an ibex. All those existing animals are illustrated by the Mohenjo-darians with remarkable realism. That they were able to observe living animals with the eyes of an artist, is well proved by the fish shown in the same seal."

The following articles regarding SIND have appeared in the different journals of India : (the numbers refer to numbers in the Bibliography).

76 Frankfort H. The Indus civilization and the near East.

Annual Bibliography of Indian Archaeology, 1932, p. 1 to 12. (also published separately).

"The stage of the Indus civilization which the excavations have disclosed was reached about the middle of the third millenium B. C. "We have noticed in discussing architecture and metrology, religious monuments and seal designs, that the suggestion of a common substratum for certain cultural traits in India and Mesopotamia has been forced upon us by the various similarities." This article has been also reviewed in SYRIA, XV, p. 385-7.

95 Mackay, Ernest. The Indus Civilization ; Some connections with Sumer, Elam and the West.

Journal Central Asian Soc. XXI, pt. 3, 0. 240 ff.

96 Mackay, E. J. H. Further Excavations at Mohenjo-daro Journal Royal Society of Arts, January 1934.

This lecture, delivered before the R.S.A. London, deals mainly with the objects and buildings excavated at M. since 1927, and discusses the probable relation of the Indus Valley culture to other contemporary civilizations.

97 Mirchandani. Bhorumal. Mohenjo-daro. Karachi, published by the Author, 1934, 93 p. 1 pl. price Rs. 1-4 Reviewd by the Madras Mail, 27-2-1934 "A convenient guide book."

98 Majumdar, N. G. Explorations in Sind. (Memoir Archaeological Survey No. 48) Delhi. Manager of Publications, 1934, Roy. 4to, XI, 172 p. 46 pl. Price Rs. 17-2.

From the Preface," In Sind itself there must have been many more stations wedded to the Chalcolithic civilization of Mohenjo-daro. The need for a systematic survey of the Indus valley and its border lands was keenly felt by the Indian Archaeological Department almost from the very beginning of its work at Mohenjo-daro. In the cold weather of 1927 Sir John Marshall enabled me to conduct excavations on a modest scale at the mounds of Jhukar near Larkana. In 1928 I explored the northern districts of Sind beginning with the deltaic region. My second journey commenced from Dokri in October 1930, and was concluded in April 1931. These two journies enabled me to examine a large number of sites and an account of my explorations of these is narrated in the following pages."

Contents. (1) Physical aspects and climate of Sind, (II) The Mounds of Jhukar near Larkana. (II,) In southern Sind and along the Indus i.e., In the Delte Country. ii, From Kotri to Amri. (iii) From Hyderabad to Arore, (IV,) Further journey along the Idus, (V.) In and around Lake Manchhar. (VI,) In the hill tract of Johi. (VII,) In the hills of Sehwan and Kohistan. (VIII,) To Karachii and Kotri through the Baran and Mol Valleys. IX, General Observations. Appendices.

Reviewed : Indian Historical Quarterly, (X) p. 827-9 by R. C. M. we sincerely congratulate Mr. Majumdar on the valuable work he has done and the excellent report he has written."

103 Mookerji, Radha Kumud : The Indus Civilization. c. 3250-2750 B. C. Journal of the United Provinces Historical Society, (VII) pt. 1. p. 1. to 21. "The Rigveda from the very nature of its geographical and historical background shows wide acquaintance with the non-Aryan world, the conditions of its life and culture, some of which, as described in the Rigveda, tally with those indicated by the remains unearthed at Mohen-jo-Daro. Thus the non-Aryan of the Rigveda may in a sense be taken to be the non-Aryan responsible for the Indus civilization."

113 Rawalinson H. G. and Venk teswara, S. V. The Indus Valley Civilization. Two views.

The Aryan Path, Bombay, February 1934, p. 84-90.

Rawlinson. The Aryan myth must take its place among the many exploded theories whose debris encumbered the shelves of the historian."

Venkateswara. "The finds at Mohenjo-daro belong to the later Vedic perio and practically the whole of the Rig-Vedic hymns are anterior to the finds in date. I have already shown that the age of the Veda is about 11,000—5th millenium B. C.

130 Vogel, J. Ph. Op. het voetspoor van Boedha (In the footsteps of the Buddha) Haarlem ; H. D. Tjeenk Willink,1934 8 vo. 1934, 165p. 20 pl. 13 illustrations. map. Price 3 guilders.

Reprinted from Nieuwe Rotterdamsche Courant 1925-26 (Letters from India). The XII chapter deals on Mohenjo-daro.

Reviewed in The Indian Guide, a political economic and literary periodical in Dutch (XLVI) p. 286f.

236 Fabri, C. L. Latest attempts to read the Indus Script (a summary). Indian Culture I. pages 50-56.

238 Hunter G. R. The Script of Harappa and Mohenjo-daro and its connection with other scripts. Introduction by S. Langdon.

(Studies in the History of Culture No. 1). London, Kegan Paul, Trench Trubner & Co., Ltd., 1934, Roy. 8 vo. 210 p. 37 pl. Price 21s.

From the Introduction : "Dr. Hunter has presented here all the known material. I am glad to have the opportunity of commending his book to scholars as a

trustworthy edition of the texts." Geographically the script bears a close resemblance to Proto-Elamite, and a less close to Sumerian of the Jemdet-Nasr and Fara periods, except as regards the anthropomorphous signs. The latter bear a close resemblance to Egyptian of the Old and Middle Kingdoms."

Reviewed. in MAN, XXXIV No. 199, by H. G. Rawlison; important conclusions which take us several steps forward."

(It may be mentioned that MAN is a monthly record of Anthropological science, published under the direction of the Royal Anthropological Institute of Great Britian and Ireland. London W. C. 1, Upper Bedford Place, Annual subscription 20/s.)

Also in the Illustrated London News May 12, 1934, p. 746 by C.E.B.

241 Piccoli, G. A. comparison between Signs of the "Indus Script" and the Signs in the Corpus Inscriptionum Etruscarum. Indian Antiquary. LXII, p. 213-5, 2 plates.

"I propose to show that certain characteristic signs recurring in the Indus script will be seen to be indentical with those found on various Etruscan utensils and monumental remains."

242 Sastri, S. Srikantha. Studies in the Indus Scripts.

Quarterly Journal of the Mythic Society, Bangalore. XXIV p. 224-30, 335-342.

I. "there is not a shred of positive evidence to prove that the Indus culture is pre-Aryan."

II. Similarities between the script of the Vikramakhol inscr. (supposed to be a development of the Indus script) and that of the Glozel forgeries—III. Videic evidence for the Aryan character of the Indus culture—VI Tribes of the Indus Valley.

281 Jayaswal, K. F. The Wikramkhol Inscription.

Indian Antiquary, (LXII,) p. 58-60. 9 plates.

"The Vikramkhol inscription supplies a link between the passage of letter-forms from the Mohenjo-daro script to Brahmi. It, however, need not necessarily be an Aryan piece of writing."

390 Keith, A. Berriedale : The Aryans and the Indus Valley Civilization.

Ojha Vol. Section K. 58-66. "The negative conclusion that the Indus Valley civilization is not of the Rigveda seems conclusively established."

It may be said that the ojha Vol. contains articles by a number of Indian and foreign scholars on various topics of Indian History, Archaeology and general culture, written in commemoration of the septuagenary of Mm. Gaurisankar H. Ojha. The great majority of articles are in Hindi, but other Indian and European languages are also represented, each having an introductory synopsis in Hindi.

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